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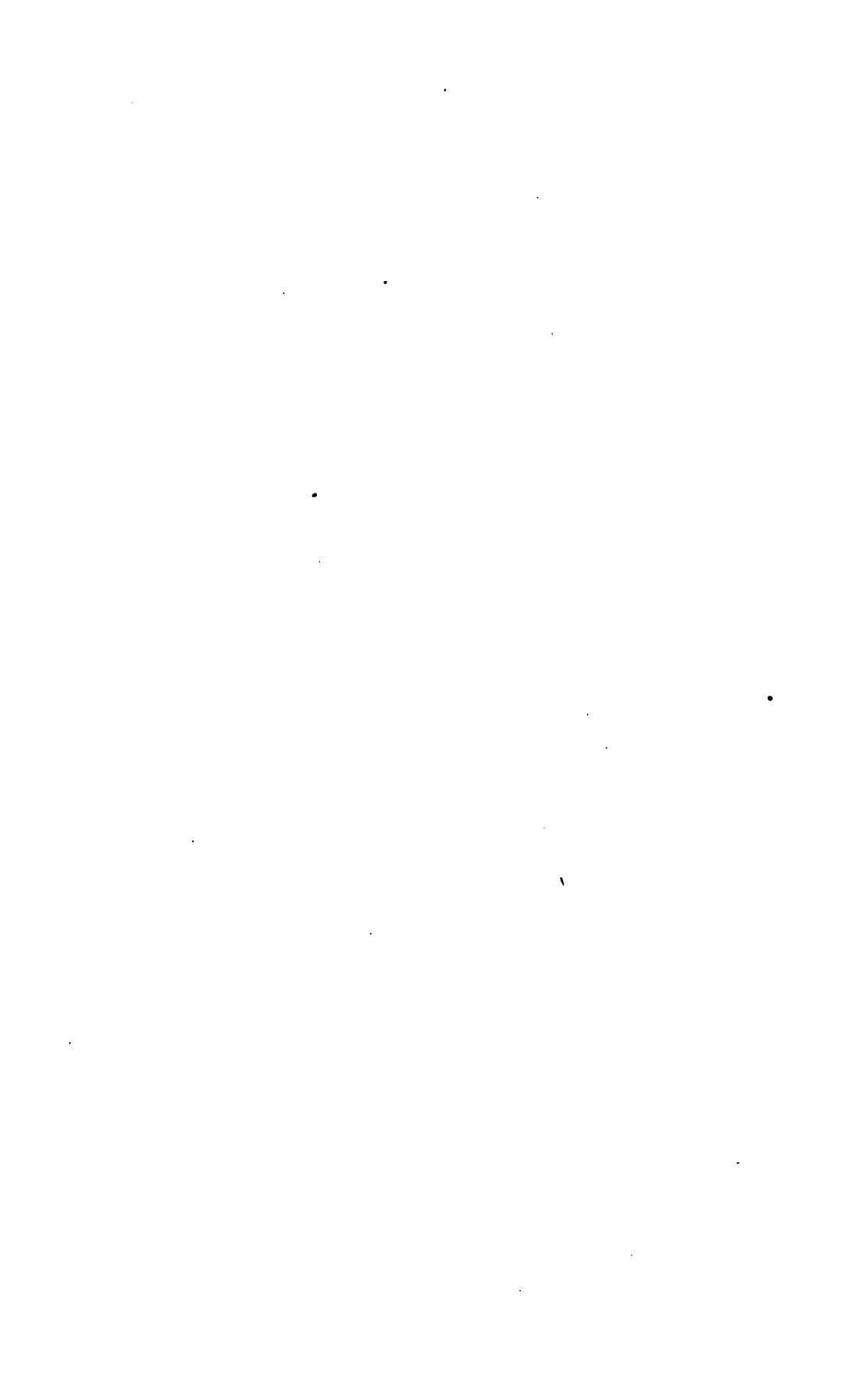
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SMITHSONIAN INSTITUTION
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BULLETIN

OF THE

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No. 53—Part II



WASHINGTON
GOVERNMENT PRINTING OFFICE

1907

CATALOGUE
OF THE
TYPE AND FIGURED SPECIMENS
OF
FOSSILS, MINERALS, ROCKS
AND ORES

IN THE
DEPARTMENT OF GEOLOGY, UNITED STATES
NATIONAL MUSEUM

PREPARED UNDER THE DIRECTION OF
GEORGE P. MERRILL
HEAD CURATOR OF GEOLOGY

Part II—FOSSIL VERTEBRATES; FOSSIL PLANTS;
MINERALS, ROCKS, AND ORES



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P R E F A C E .

This volume forms Part II of the Catalogue of Type Specimens in the Department of Geology, in the United States National Museum, Part I of which was issued in 1905. It was expected that the two parts would form one volume. It became evident, however, that such a volume would be cumbersome, and hence it was divided into two parts, the first being devoted wholly to fossil invertebrates. Part II therefore comprises Section II, devoted to fossil vertebrates; Section III, to fossil plants, and Section IV, to minerals, rocks, and ores. As with Part I, the catalogue closes with January 1, 1905. No changes of importance have been made, and it remains only to note that the work of supervising the preparation of Section II, which it was expected would fall upon Mr. Lucas, was assigned to others, as is mentioned in the introduction.

GEORGE P. MERRILL,
Head Curator of Geology.

JUNE 1, 1907.

SECTION II.

CATALOGUE OF THE TYPES, COTYPES, AND FIGURED SPECIMENS
OF FOSSIL VERTEBRATES IN THE DEPARTMENT OF GEOL-
OGY, UNITED STATES NATIONAL MUSEUM.

INTRODUCTION.

The list of types, cotypes, paratypes, and figured specimens (plesiotypes) of vertebrate fossils here given was begun under the direction of Mr. F. A. Lucas while acting curator of the section of vertebrate paleontology, and has been revised and brought to completion by Messrs. J. W. Gidley and C. W. Gilmore, assisted by Mrs. M. S. F. Jouy and Miss M. W. Moodey.

It can not be claimed that the list is absolutely complete, for the reason that much material still remains in boxes in storage. The withdrawal of Mr. Lucas from the Museum seems to render advisable the publication of the catalogue at this time.

The arrangement, as in the case of the invertebrate section, is alphabetical, and in each case is given a brief description of the specimen, horizon, locality, the place and date of publication, and the synonymy.

As will be noted, there are represented types (and cotypes) of some 385 species, many of which are of great value, since they were obtained by the early explorers, including Evans, Hayden, Cope, and Marsh, and comprise many of the types on which Leidy, Cope, and Marsh founded much of their early work in vertebrate paleontology. The material was obtained mainly under the auspices of the various United States geological surveys and exploring expeditions.

CATALOGUE OF THE TYPES, COTYPES, AND
FIGURED SPECIMENS OF FOSSIL VERTE-
BRATES IN THE DEPARTMENT OF
GEOLOGY, U. S. NATIONAL
MUSEUM.

BIRDS.

1120. *Diatryma giganteum* Cope. Type.
Parts of tarso-metatarsus. Eocene. New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1876, pp. 10, 11; Rept. U. S.
Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 70, pl. 32,
figs. 23-25.
4978. *Hesperornis regalis* Marsh. Plesiotype.
Skeleton. Niobrara (Cretaceous). Kansas.
Lucas, Proc. U. S. Nat. Mus., XXVI, 1903, pp. 545-550, text figs.
3, 4; Smithsonian Misc. Coll. (Quart. issue), XLV, 1903, p. 95,
pl. 27.
4976. *Mancalla californiensis* Lucas. Type.
Proximal portion of left humerus. Miocene. Los Angeles,
California.
Lucas, Proc. U. S. Nat. Mus., XXIV, 1901, pp. 133, 134, text figs.
1-3.
2166. *Puffinus eyermani* Shufeldt. Type.
Tibia and tarsus. Middle Miocene. South of France.
Shufeldt, Proc. Acad. Nat. Sci. Phila., 1896, p. 511, pl. 24, figs. 3,
4, 8; p. 513, text fig. 1.
2168. *Tantalus milne-edwardsi* Shufeldt. Type.
Upper end of tibia. Middle Miocene. South of France.
Shufeldt, Proc. Acad. Nat. Sci. Phila., 1896, p. 513, text fig. 1.

FISHES.

1629. *Acanthodes? pristis* Clarke. Type.
Part of dermal armor. Naples (Devonian). Sparta, New
York.
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 42.
= *Acanthoëssus? pristis*.
1629. *Acanthoëssus? pristis* (Clarke). See *Acanthodes? pristis*.

3992. *Amia dictyocephala* Cope. Paratype.
 Portion of skeleton, lacking head and tail, on slab. Eocene.
 South Park, Colorado.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr. (2), No. 1, 1875,
 p. 3; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 745, pl. 59,
 fig. 1.
2181. *Amia (Protamia) media* Leidy. Type.
 Centrum of vertebra. Bridger (Eocene). Junction of Big
 Sandy and Green rivers, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1873, p. 98; Rept. U. S. Geol.
 Surv. Terr., I, 1873, p. 188, pl. 32, figs. 7-9.
5374. *Amia scutata* Cope. Type.
 Partial skeleton with posterior and anterior portions want-
 ing. Eocene. South Park, Colorado.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr. (2), No. 1, 1875,
 p. 3; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 745, pl. 60,
 fig. 1.
3996. *Amhiplaga brachyptera* Cope. Type.
 Partial skeleton lacking head. Green River (Eocene).
 Twin Creek, Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 812;
 Rept. U. S. Geol. Surv. Terr., III, 1884, p. 84, pl. 12, fig. 4.
4011. *Amhiplaga brachyptera* Cope. Plesiotype.
 Nearly complete skeleton on slab. Green River (Eocene).
 Twin Creek, Wyoming.
 Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 48, pl. 7, fig. 5.
4063. *Amyzon commune* Cope. Type.
 Complete skeleton on slab. Florissant (Eocene). Floris-
 sant, South Park, Colorado.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., I, No. 2, 1874,
 p. 50; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 749, pl. 5,
 fig. 21.
4074. *Amyzon mentale* Cope. Cotypes.
 4075. Partial skeleton on slab, and portion of skeleton lacking
 tail and anterior portion of head. Eocene. Osino,
 Nevada.
 Cope, Proc. Amer. Philos. Soc., XII, 1872, p. 481; Rept. U. S.
 Geol. Surv. Terr., III, 1884, p. 749, pl. 59, fig. 2; pl. 60, fig. 2.
4231. *Anædopogon tenuidens* Cope. Type.
 Partial skeleton including head. Upper Cretaceous. Near
 Para, Brazil.
 Cope, Proc. Amer. Philos. Soc., XII, 1872, p. 54.
13. *Apateacanthus vetustus* (Clarke). See *Pristacanthus vetustus*.
4045. *Asineops pauciradiatus* Cope. Type.
 Complete skeleton. Green River (Eocene). Twin Creek,
 Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 813;
 Rept. U. S. Geol. Surv. Terr., III, 1884, p. 87, pl. 14, fig. 1.

4009. **Asineops squamifrons** Cope. Type.
Anterior portion of skeleton; head missing. Green River
(Eocene). Green River, Wyoming.
Cope, Proc. Amer. Philos. Soc., XI, 1870, p. 381; Rept. U. S. Geol.
Surv. Terr., III, 1884, p. 85, pl. 9, fig. 5.
2351. **Astrapis desiderata** Walcott. Type.
Plates. Middle Ordovician. Near Canyon City, Colorado.
Walcott, Bull. Geol. Soc. Amer., III, 1892, p. 166, pl. 3, figs. 6-14;
pl. 4, figs. 1-4.
3518. **Chitinodus latus** (Leidy). See *Helodus coxanus*.
2366. **Cladodus formosus** Hay. Type.
Tooth. Devonian. Northwest edge of Lime mesa, south
slope of Needle Mountain, Colorado.
Hay, Amer. Geol., XXX, 1902, p. 373, text fig. 1.
4854. **Cladodus girtyi** Hay. Type.
Tooth. Coal Measures. Colorado.
Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 98, text fig. 2.
3969. **Clastes** sp. undet.
Portions of head plate and scales. Bridger (Eocene). Hams
Fork of Green River, Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, figs. 3-14.
3972. **Clastes** sp. undet (large).
Scales. Bridger (Eocene). Hams Fork of Green River,
Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, figs. 17-23.
3973. **Clastes** sp. undet.
Centrum of vertebra. Bridger (Eocene). Hams Fork of
Green River, Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, fig. 45a.
2582. **Clastes aganus** Cope. Type.
Fragments of cranium, vertebræ, and scales. Wasatch
(Eocene). Gallinas River, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 38, pl. 23, figs. 10-29.
=*Lepisosteus aganus*.
3974. **Clastes anax** Cope. Type.
Fragments of skull and scales. Bridger (Eocene). Hams
Fork of Green River, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p.
633; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 53, pl. 2, figs.
50-52.
=*Lepisosteus atrox* (fide Hay).
3970. **Clastes atrox** (Leidy)? Plesiotype.
Portions of lower jaw and scales (in conglomerate mass).
Bridger (Eocene). Hams Fork of Green River,
Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 54, pl. 2, figs. 1-2b.
=*Lepisosteus atrox*.

3971. **Claeses cycliferus** Cope. Type.
Portions of head plates and scales. Eocene. Washakie
Basin. Mammoth Buttes. Wyoming.
Cope. Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p.
634; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 54, pl. 2, figs.
25-45.
= *Lepisostens cycliferus*.
2584. **Claeses integer** Cope. Type.
Cranial bones, vertebræ, and scales. Wasatch Eocene.
Gallinas River. New Mexico.
Cope. Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 41, pl. 24, figs. 1-16.
= *Lepisosteus integer*.
86. **Clupea alta** Leidy. Type and paratypes.
Specimens on slab. Green River (Eocene). Green River,
Wyoming.
Leidy. Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 196, 347, pl. 17,
fig. 2.
= *Diplomystus altus*.
87. **Clupea humilis** Leidy. Type.
Specimen on slab. Green River (Eocene). Green River,
Wyoming.
Leidy. Proc. Acad. Nat. Sci. Phila., 1856, p. 256; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 195, 347, pl. 17, fig. 1.
= *Diplomystus humilis*.
2590. **Corax pristodontus** (Agassiz). See *Galeocерdo pristodontus*.
4683. **Ctenacanthus acutus** Eastman. Type.
Spine. Keokuk (Mississippian). Keokuk, Iowa.
Eastman, Amer. Journ. Sci. (4), III, 1897, p. 12, fig. 2.
4846. **Ctenacanthus decussatus** Eastman. Type.
Spine. Kinderhook (Mississippian). Quarry, Marshall
County, Iowa.
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, p. 84, pl. 6, fig. 2.
3393. **Ctenacanthus longinodosus** Eastman. Type.
Spine. Kinderhook (Mississippian). Quarry, Marshall
County, Iowa.
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, p. 78, fig. 8, pl. 5, fig. 2.
4844. **Ctenacanthus lucasi** Eastman. Type.
Spine. Kinderhook (Mississippian). Quarry, Marshall
County, Iowa.
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, p. 80, pl. 6, fig. 1.
3383. **Ctenacanthus solidus** Eastman. Type.
Spine. Kinderhook (Mississippian). Quarry, Marshall
County, Iowa.
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, p. 90, text fig. 13.

4843. **Ctenacanthus solidus** Eastman. Paratype.
Spine. Kinderhook (Mississippian). Quarry, Marshall
County, Iowa.
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, p. 90, pl. 7, fig. 3.
4845. **Ctenacanthus spectabilis** St. John and Worthen. Plesiotype.
Spine. Kinderhook (Mississippian). Quarry, Marshall
County, Iowa.
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, p. 88, pl. 5, fig. 1.
3385. **Ctenacanthus venustus** Eastman. Paratype.
Spine. Kinderhook (Mississippian). Iowa?
Eastman, Bull. Mus. Comp. Zoöl., Harvard Coll., XXXIX, No. 3,
1902, pp. 81-83, text fig. 10, pl. 3, fig. 2.
3391. **Ctenacanthus xiphias** St. John and Worthen. Type.
Spine. Keokuk (Mississippian). Keokuk, Iowa.
Eastman, Amer. Journ. Sci. (4), III, 1897, p. 11, fig. 1.
4475. **Ctenerpeton alveolatum** Cope. Type.
Skeleton on slab. Coal Measures. Cannelton, Pa.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 83, pl. 3, fig. 1.
2345. **Dapedoglossus acutus** (Leidy). Plesiotype.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 72.
= *Phareodus acutus*.
See *Phareodon sericeus*.
3987. **Dapedoglossus acutus** (Leidy). Plesiotypes.
4091. (1) Right dentary bone containing teeth; (2) left dentary
bone containing teeth. Bridger (Eocene). Hams
Fork, Green River, Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 72, pl. 5, (1) figs.
18, 18a; (2) figs. 19, 19a.
= *Phareodus acutus*.
4003. **Dapedoglossus æquipinnis** Cope. Type.
Specimen on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., IV, 1878, p. 77;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 73, pl. 7, fig. 2.
= *Phareodus æquipinnis*.
4014. **Dapedoglossus testis** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 807;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 71, pl. 7, fig. 1.
= *Phareodus testis*.

4006. **Dapedoglossus testis** Cope. Paratypes.
 4007. (1) Head and anterior portion of skeleton; (2) complete skeleton on slab. Green River (Eocene). Twin Creek, Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 807; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 71, pl. 8, (2) fig. 1, (1) fig. 2.
 = *Phareodus testis*.
2352. **Dictyorhabdus priscus** Walcott. Type.
 Chordal sheath. Middle Ordovician. Near Canyon City, Colorado.
 Walcott, Bull. Geol. Soc. Amer., III, 1892, p. 165, pl. 3, fig. 1-5.
65. **Dinichthys newberryi** Clarke. Type.
 Right ramus of jaw. Devonian. Bristol, Ontario County, New York.
 Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 17, pl. 1, fig. 1.
4019. **Diplomystus altus** (Leidy). Plesiotype.
 Skeleton on slab. Green River (Eocene). Twin Creek, Wyoming.
 Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 79, pl. 10, fig. 5.
86. **Diplomystus altus** (Leidy). See *Clupea alta*.
4005. **Diplomystus analis** Cope. Type.
 Skeleton on slab. Green River (Eocene). Twin Creek, Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 809; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 75, pl. 8, fig. 3.
3998. **Diplomystus analis** Cope. Paratypes,
 4004. Skeleton and impression on slab and skeleton on slab. Green River (Eocene). Twin Creek, Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 809; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 75, pl. 7, fig. 4; pl. 10, fig. 2.
4022. **Diplomystus humilis** Leidy. Plesiotype.
 Complete skeleton on slab. Green River (Eocene). Twin Creek, Wyoming.
 Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 77, pl. 10, fig. 4.
87. **Diplomystus humilis** (Leidy). See *Clupea humilis*.
4020. **Diplomystus pecterosus** Cope. Type.
 Skeleton on slab. Green River (Eocene). Twin Creek, Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 810; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 76, pl. 10, fig. 3.
4338. **Dittodus lucasi** Hay. Type.
 Impression of tooth in nodule. Upper Coal Measures. Mazon Creek, Grundy County, Illinois.
 Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 97, text fig. 1.

4848. **Elonichthys hypsilepis** Hay. Reverse of type.
Impression of fish in nodule. Upper Coal Measures. Mazon
Creek, Grundy County, Illinois.
Hay, Proc. Amer. Philos. Soc. XXXIX, 1900, pp. 117, 120, pl. 7 (as
Elonichthys peltigerus hypsilepis).
2180. **Enchodus shumardi** Leidy. Type.
Dentary bone containing six teeth. Cretaceous. Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1856, p. 257; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 289, 347, pl. 17, fig. 20.
2350. **Eriptychius americanus** Walcott. Type.
Scales. Middle Ordovician. Near Canyon City, Colorado.
Walcott, Bull. Geol. Soc. Amer., III, 1892, p. 167, pl. 4, figs. 5-11.
3997. **Erismatopterus endlichi** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. Geol. and Geogr. Surv. Terr., III, 1877, p. 811; Rept.
U. S. Geol. Surv. Terr., III, 1884, p. 82, pl. 12, fig. 5.
2588. **Galeocerdo** sp. undet.
Tooth. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pl. 22, fig. 16.
2590. **Galeocerdo pristodontus** (Agassiz). Plesiotype.
Tooth. Wasatch (Eocene). Gallinas River, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 38, pl. 22, fig. 18.
= *Corax pristodontus*.
2583. **Gar** sp. undet.
Scales and opercular bones. Wasatch (Eocene). Gallinas
River, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pl. 23, figs. 30, 31.
3518. **Helodus coxanus** Newberry. Type.
Symphyseal teeth. Keokuk (Mississippian). Keokuk,
Iowa.
Newberry, Trans. N. Y. Acad. Sci., XVI, 1897, p. 301, pl. 24, fig. 24.
= *Chitinodus latus*.
1682. **Hemiptychodus mortoni** (Mantell). See *Ptychodus mortoni*.
5461.
1981. **Holonema rugosa** (Claypole). Plesiotype.
Scale. Catskill (Devonian). Mansfield, Tioga County,
Pennsylvania.
Cope, Proc. U. S. Nat. Mus., XIV, 1891, p. 456; Proc. Amer.
Philos. Soc., 1892, p. 223, pl. 7, fig. 2.
1982. **Holonema rugosa** (Claypole). Plesiotype.
Pectoral spine. Catskill (Devonian). Mansfield, Tioga
County, Pennsylvania.
Cope, Proc. U. S. Nat. Mus., XIV, 1891, p. 456, pl. 30, fig. 7.

4511. **Holoptychius fabelianus** Cope. Type.
Scale. Carboniferous. Conemaugh Network, near Pitts-
burg, Pennsylvania.
Cope, Proc. Amer. Philos. Soc. XXXV, 1897, p. 75, pl. 2, fig. 2.
4512. **Holoptychius latus** Cope. Type.
Scale. Carboniferous. Factoryville, Pennsylvania.
Cope, Proc. Amer. Philos. Soc. XXXV, 1897, p. 74, pl. 2, fig. 3.
4514. **Holoptychius serrulatus** Cope. Type.
Impression of scale. Carboniferous. Mansfield,
Tioga County, Pennsylvania.
Cope, Proc. Amer. Philos. Soc. XXXV, 1897, p. 71, pl. 2, fig. 1.
4473. **Keraterpeton tenuicorne** Cope. Plesio-type.
Partial skeleton on slab. Coal Measures. Linton, Ohio.
Cope, Proc. Amer. Philos. Soc. XXXV, 1897, p. 85, pl. 3, fig. 2.
- Lepidosteus.** See **Lepisosteus.**
2582. **Lepisosteus aganus** Cope. See **Clastes aganus.**
2175. **Lepisosteus atrox** Leidy. Type.
Anterior dorsal vertebra. Bridger Eocene. Junction Big
Sandy and Green rivers, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1873, p. 97; Rept. U. S. Geol.
Surv. Terr., I, 1873, p. 189, pl. 32, figs. 14, 15 (as **Lepisosteus**).
3970. **Lepisosteus atrox** Leidy. See **Clastes atrox?**
3974. **Lepisosteus atrox** Leidy. See **Clastes anax.**
3971. **Lepisosteus cycliferus** (Cope). See **Clastes cycliferus.**
2584. **Lepisosteus integer** (Cope). See **Clastes integer.**
2173. **Lepisosteus simplex** Leidy. Cotypes.
2174. (2) Basi-occipital, centra of three adjoining vertebrae, (1)
and scales. Bridger (Eocene). Near Washakie Sta-
tion, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1873, p. 78; Rept. U. S. Geol.
Surv. Terr., I, 1873, p. 191, pl. 32, (2) figs. 13, 26, (1) figs. 31-34
(as **Lepisosteus**).
2176. **Lepisosteus** sp. undet.
Centrum of vertebra. Bridger (Eocene). Junction Big
Sandy and Green rivers, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 190, pl. 32, figs. 16,
17 (as **Lepisosteus**).
2177. **Lepisosteus** sp. undet.
Fragment of jaw. Bridger (Eocene). Junction of Big
Sandy and Green rivers, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 190, pl. 32, fig. 25
(as **Lepisosteus**).
5477. **Lepisosteus** sp. undet.
Four scales. Bridger (Eocene). Little Sandy Creek, Wy-
oming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 190, pl. 32, figs.
35-38 (as **Lepisosteus**).

5394. **Lepisosteus** sp. undet. Type.
Scales. Bridger (Eocene). Junction Big Sandy and Green
rivers, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 190, pl. 32, figs.
27-30 (as *Lepidosteus*).
4302. **Leuciscus turneri** Lucas. Type.
Skeleton on slab. Miocene. West side south end Big
Smoky Valley, Silver Peak quadrangle, Esmeralda
County, Nevada.
Lucas, Proc. U. S. Nat. Mus., XXIII, 1900, p. 333, pl. 8.
1987. **Megalichthys macropomus** Cope. Type.
Fish on slab. Carboniferous. Leavenworth, Kansas.
Cope, Proc. Amer. Philos. Soc., XXX, 1892, p. 226, pl. 8; Journ.
Acad. Nat. Sci. Phila. (2), IX, 1894, p. 436, pl. 19, figs. 1, 1a.
= *Parabatrachus macropomus*.
3994. **Mioplosus beani** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv., III, 1877, p. 816; Rept.
U. S. Geol. Surv. Terr., III, 1884, p. 91, pl. 12, fig. 3.
3995. **Mioplosus longus** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv., III, 1877, p. 815; Rept.
U. S. Geol. Surv. Terr., III, 1884, p. 90, pl. 12, fig. 2.
1977. **Mycterops ordinatus** Cope. Type.
Nuchal buckler and cranial plates. Carboniferous. Can-
nelton, Beaver County, Pennsylvania.
Cope, Amer. Nat., XX, 1886, p. 1029, fig. 1; XXII, 1888, p. 914, pl.
15, fig. 3.
2118. **Mylocyprinus kingii** Cope. Type.
Jaw fragments. Pleistocene. Catherines Creek, Idaho.
Cope, Proc. Amer. Philos. Soc., XI, 1870, p. 544.
= *Mylocyprinus robustus*.
2118. **Mylocyprinus robustus** Leidy. See *Mylocyprinus kingii*.
2589. **Otodus** sp. undet.
Tooth. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pl. 22, fig. 17.
2591. ? **Otodus** sp. undet.
Tooth. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p.
38, pl. 22, fig. 19.
1628. **Palæoniscus devonicus** Clarke. Type.
Scales. Genesee (Devonian). Sparta, New York.
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 41.
= *Paleoniscum devonicum*.

33904. **Palæoniscus leidyana** Lea. Type.
Scale on slab. Upper Coal Measures. Wilkesbarre, Penn-
sylvania.
Lea, Journ. Acad. Nat. Sci. Phila. (2), II, 1853, p. 206, pl. 20,
figs. 4, 5.
= *Rhadinichthys leidyianus*.
3961. **Pappichthys corsoni** Cope. Type.
Part of dentary bone. Bridger (Eocene). Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p.
634; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 60, pl. 4, fig. 21.
3960. **Pappichthys corsoni** Cope. Plesiotype.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 60, pl. 4, fig. 30.
See *Pappichthys symphysis*.
5475. **Pappichthys corsoni** Cope. Plesiotypes.
5476. Vertebrae. Bridger (Eocene). Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 60, pl. 4, (1) figs.
32-36, (2) 23-29.
3968. **Pappichthys lævis** Cope. Type.
Portions of jaws and centra of vertebrae. Bridger (Eocene).
Cottonwood Creek, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 636; Rept.
U. S. Geol. Surv. Terr., III, 1884, p. 58, pl. 3, figs. 2-11.
3959. **Pappichthys medius** (Leidy). Plesiotype.
Centra of vertebrae. Bridger (Eocene). Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 60, pl. 4, figs. 7-20.
3958. **Pappichthys plicatus** Cope. Type.
Portion of jaws and centra of vertebrae. Bridger (Eocene).
Cottonwood Creek, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 635; Rept.
U. S. Geol. Surv. Terr., III, 1884, p. 59, pl. 4, figs. 1-6.
3965. **Pappichthys sclerops** Cope. Type.
Left dentary bone. Bridger (Eocene). Cottonwood Creek,
Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p.
635; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 57, pl. 3, fig. 1.
3960. **Pappichthys symphysis** Cope. Type.
Fragment of vertebra. Bridger (Eocene). Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p.
634.
= *Pappichthys corsoni*.
3963. **Pappichthys** sp. undet.
Basi-occipital and caudal vertebrae. Bridger (Eocene).
Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, figs. 55-57.
3962. **Pappichthys** sp. undet.
Centra of vertebrae. Bridger (Eocene). Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, figs. 53-54b.

5450. **Pappichthys** sp. undet.
Caudal vertebra. Bridger (Eocene). Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, fig. 58.
3964. **Pappichthys** sp. undet.
Basi occipital. Bridger (Eocene). Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, fig. 59.
5451. [**Pappichthys** sp. undet.]
Centrum of vertebra. Bridger (Eocene). Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, pl. 2, figs. 60-60b (as unknown fish).
1987. **Parabatrachus macropomus** (Cope). See *Megalichthys macropomus*.
4296. **Peripristis semi-circularis** Newberry and Worthen.
Plesiotype.
Teeth. Upper Carboniferous. Rock Bluff, Bellevue, Nebraska.
St. John, Final Rept. U. S. Geol. Surv. Nebraska and Adjacent Terr., 1872, p. 242, pl. 3, figs. 3, 4; pl. 4, fig. 20a, b.
2345. **Phareodon sericeus** Cope. Type.
Two teeth. Bridger (Eocene). Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p. 638.
= *Phareodus acutus*.
See *Dapedoglossus acutus*.
2178. **Phareodus acutus** Leidy. Type.
Portions of dentary containing teeth; portions of right and left premaxillary, and a portion of maxillary. Bridger (Eocene). Junction of Big Sandy and Green rivers, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1873, p. 99; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 193, pl. 32, figs. 47-51.
3987. **Phareodus acutus** Leidy. See *Dapedoglossus acutus*.
- 4091.
2345. **Phareodus acutus** Leidy. See *Phareodon sericeus* and *Dapedoglossus acutus*.
4003. **Phareodus æquipinnis** (Cope). See *Dapedoglossus æquipinnis*.
4006. **Phareodus testis** (Cope). See *Dapedoglossus testis*.
- 4007.
- 4014.
- 4783 **Pholidophorus americanus** Eastman. Cotypes.
to Several complete specimens and fragments of other individuals.
4791. Jurassic. Black Hills, South Dakota.
Eastman, Science (2), IX, 1899, p. 642; Bull. Geol. Soc. Amer., X, 1899, p. 398, pl. 45, figs. 1-3; pl. 46, figs. 1, 2; pl. 47, figs. 1 (?), 2-5.

2177. **Pimelodus antiquus** Leidy. Type.
Pectoral spine with dentary bones. Tertiary (Eocene).
Junction Big Sandy and Green rivers. Wyoming.
Leidy. Proc. Acad. Nat. Sci. Phila., 1873, p. 99; Rept. U. S. Geol.
Surv. Terr., I, 1873, p. 193, pl. 32, figs. 44-46.
4379. **Platysomus lacovianus** Cope. Type.
Impression of fish in nodule. Coal Measures. Mazon
Creek near Morris. Grundy County, Illinois.
Cope. Proc. U. S. Nat. Mus., XIV, 1891, p. 462, pl. 31, fig. 11.
4396. **Plioplarchus septemspinosus** Cope. Type.
Skeleton on slab. Tertiary. Van Horn's ranch, Grant
County, Oregon.
Cope, Amer. Nat., XXIII, 1889, p. 625.
4236. **Plioplarchus sexspinosus** Cope. Type.
Skeleton without head on slab. Tertiary. Near Sentinel
Butte, Billings County, North Dakota.
Cope, Amer. Journ. Sci. (3), XXV, 1883, p. 416; Rept. U. S. Geol.
Surv. Terr., III, 1884, p. 729.
4695. **Plioplarchus whitei** Cope. Type.
Complete skeleton and impression on slab. Upper Creta-
ceous? Pilot Knob, South Dakota.
Cope, Amer. Journ. Sci. (3), XXV, 1883, p. 414; Rept. U. S. Geol.
Surv. Terr., III, 1884, p. 728, pl. 24, fig. 1.
4041. **Priscacara clivosa** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., IV, 1878, p. 76;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 96, pl. 13, fig. 3.
4042. **Priscacara cypha** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 817;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 94, pl. 13, fig. 2.
4043. **Priscacara liops** Cope. Type.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 818;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 97, pl. 14, fig. 2.
4044. **Priscacara liops** Cope. Paratype.
Skeleton on slab. Green River (Eocene). Twin Creek,
Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 818;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 97, pl. 14, fig. 3.
4039. **Priscacara oxyprion** Cope. Type.
Skeleton on slab. Green River (Eocene). Wyoming.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., IV, 1878, p. 74;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 94, pl. 14, fig. 5 (as
P. serrata on plate).

4008. **Priscacara pealei** Cope. Cotypes.
 4037. Skeletons on slabs. Green River (Eocene). Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., IV, 1878, p. 75;
 Rept. U. S. Geol. Surv. Terr., III, 1884, p. 96, pl. 8, fig. 4; pl.
 14, fig. 4.
4002. **Priscacara serrata** Cope. Type.
 Complete skeleton on slab. Green River (Eocene). Twin
 Creek, Wyoming.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 816;
 Rept. U. S. Geol. Surv. Terr., III, 1884, p. 93, pl. 13, fig. 1.
13. **Pristacanthus vetustus** Clarke. Type.
 Spine. Naples (Devonian). Milo, Yates County, New
 York.
 Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 42, pl. 1, fig. 7.
 = *Aplateacanthus vetustus*.
1682. **Ptychodus mortoni** Mantell. Plesio-type.
 5461. (1) Two teeth; (2) three teeth. Cretaceous. Chalk Bluff
 Creek, Kansas.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 295, pl. 18, (1) figs.
 1-4, (2) figs. 5-10.
 = *Hemiptychodus mortoni*.
4090. **Pyrmnetes longiventer** Cope. Type.
 Impression and relief of nearly complete skeleton. Terti-
 ary? Tuxtla, Chiapas, Mexico.
 Cope, Proc. Amer. Philos. Soc., XII, 1872, p. 52.
33904. **Rhadinichthys leidyianus** (Lea). See *Palæoniscus leidy-*
ianus.
3985. **Rhineastes arcuatus** Cope. Type.
 Spine and fragments. Bridger (Eocene). Wyoming.
 Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, pp.
 638, 641; Rept. U. S. Geol. Surv. Terr., III, 1884, pp. 63, 66, pl.
 5, figs. 12, 12a, 12b.
3980. **Rhineastes calvus** Cope. Type.
 Fragments of cranium, dorsal spine. Bridger (Eocene).
 Mammoth Buttes, South Bitter Creek, Wyoming.
 Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr., for 1872, 1873, pp.
 638, 640; Rept. U. S. Geol. Surv. Terr., III, 1884, pp. 63, 65, pl.
 5, figs. 3, 3a, 4.
4086. **Rhineastes pectinatus** Cope. Type.
 Head and anterior part of skeleton. Eocene. Florissant,
 Colorado.
 Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1874, p. 49; Rept.
 U. S. Geol. Surv. Terr., III, 1884, p. 747, pl. 5, fig. 13.
3984. **Rhineastes peltatus** Cope. Type.
 Occipital-parietal bone and dorsal spine. Bridger (Eocene).
 South Bitter Creek, Wyoming.
 Cope, Proc. Amer. Philos. Soc., XII, 1872, p. 486; Rept. U. S. Geol.
 Surv. Terr., III, 1884, pp. 63, 64, pl. 5, figs. 1, 1a, 2, 2a.

4099. *Rhineastes radulus* Cope. Type.
Fragments of skull. Bridger (Eocene). Bad Lands, Cottonwood Creek, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p. 638; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 67, pl. 5, figs. 14-17.
3977. *Rhineastes smithii* Cope. Type.
Basi-occipital, vertebræ, pectoral spine, and articular of mandible. Bridger (Eocene). Mammoth Buttes, South Bitter Creek, Wyoming.
Cope, Proc. Amer. Philos. Soc., XII, 1872, p. 486; Rept. U. S. Geol. Surv. Terr., III, 1884, pp. 63, 64, pl. 5, figs. 5-9.
3978. *Rhineastes smithii* Cope. Paratypes.
3979. (1) Pectoral spine, and (2) part of dentary bone. Bridger (Eocene). Mammoth Buttes, South Bitter Creek, Wyoming.
Cope, Proc. Amer. Philos. Soc., XII, 1873, p. 486; Rept. U. S. Geol. Surv. Terr. III, 1884, pp. 63, 64, pl. 5, (1) fig. 10, (2) fig. 11.
4337. *Rhizodopsis mazonius* Hay. Type.
Impression of scale in nodule. Carboniferous. Mazon Creek, near Morris, Grundy County, Illinois.
Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 110.
4392. *Sagenodus browniæ* Cope. Type.
Impression and relief of scale in nodule. Coal Measures. Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 81, pl. 1, fig. 7.
= *Sagenodus occidentalis*.
4386. *Sagenodus conchiolēpis* Cope. Type.
Impression and relief of scale in nodule. Coal Measures. Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 79, pl. 1, fig. 4.
= *Sagenodus lacovianus*.
4394. *Sagenodus foliatus* Cope. Type.
Impression and relief of scale in nodule. Coal Measures. Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 77, pl. 1, fig. 1.
4372. *Sagenodus foliatus* Cope. Paratype.
Impression and relief of scale in nodule. Coal Measures. Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, pp. 76, 77.
4363. *Sagenodus gurleianus* Cope. Type.
Impression and relief of scale in nodule. Coal Measures. Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 82, pl. 1, fig. 9.
[Gurleianus preoccupied made type of *Sagenodus textilis* Hay.]
= *Sagenodus textilis*.

4373. **Sagenodus lacovianus** Cope. Type.
Impression and relief of scale in nodule. Coal Measures.
Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 79, pl. 1, fig. 5.
4386. **Sagenodus lacovianus** Cope. Plesiotype.
Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 108.
See *Sagenodus conchiolepis*.
4368. **Sagenodus magister** Cope. Type.
Impression and relief of scale in nodule. Coal Measures.
Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 81, pl. 1, fig. 8.
= *Sagenodus reticulatus*.
4392. **Sagenodus occidentalis** (Newberry and Worthen). Plesiotype.
Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 103.
See *Sagenodus browniæ*.
4364. **Sagenodus quincunciatus** Cope. Type.
Impression and relief of scale in nodule. Coal Measures.
Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 80, pl. 1, fig. 6.
4365. **Sagenodus quincunciatus** Cope. Paratype.
Impression and relief of scale in nodule. Coal Measures.
Mazon Creek, Grundy County, Illinois.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 80.
4368. **Sagenodus reticulatus** (Newberry and Worthen). Plesiotype.
Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 106.
See *Sagenodus magister*.
4390. **Sagenodus reticulatus** (Newberry and Worthen). Plesiotypes.
4391. Scales. Coal Measures. Linton, Ohio.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 78, pl. 1, (1) fig. 2, (2) fig. 3.
4363. **Sagenodus textilis** Hay. Type.
Hay, Amer. Nat., XXXIII, 1899, p. 783.
See *Sagenodus gurleianus*.
3577. **Saurocephalus leanus** (Hays). Type.
Leidy, Trans. Amer. Philos. Soc. (2), XI, 1857, pp. 91-95, pl. 6,
figs. 12-15.
See *Saurodon leanus*.
3577. **Saurodon leanus** Hays. Type.
Anterior part of both jaws. Greensand (Cretaceous). Near
Moorestown, New Jersey.
Hays, Trans. Amer. Philos. Soc. (2), III, 1830, pp. 471-477, pl. 16,
figs. 1-10.
= *Saurocephalus leanus*.

2209. *Scylliorhinsis gracilis* Williston. Type.
Tooth. Greensand (Cretaceous). Greenleaf Ranch, ten
miles west of Belvidere, Kansas.
Williston, Kansas Univ. Quar., VII, 1900, p. 245, pl. 24, fig. 6.
2207. *Scylliorhinsis planidens* Williston. Type.
Tooth. Greensand (Cretaceous). Greenleaf Ranch, ten
miles west of Belvidere, Kansas.
Williston, Kansas Univ. Quar., VII, 1900, p. 245, pl. 24, fig. 7.
2208. *Scylliorhinsis rugosus* Williston. Type.
Tooth. Greensand (Cretaceous). Greenleaf Ranch, ten
miles west of Belvidere, Kansas.
Williston, Kansas Univ. Quar., VII, 1900, p. 245, pl. 24, fig. 5.
4855. *Strepsodus arenosus* Hay. Type.
Scale in nodule. Lower Carboniferous. Near Colliers
Station, Blair County, Pennsylvania.
Hay, Proc. Amer. Philos. Soc., XXXIX, 1900, p. 113, text fig. 3.
4979. *Syllæmus latifrons* Cope. Type.
Head and body. Cretaceous. New Mexico?
Cope, Rept. U. S. Geol. Surv. Terr., II, 1875, pp. 181, 273; Rept.
U. S. Geol. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 27, pl. 23,
figs. 1, 2.
1717. *Tamiobatis vetustus* Eastman. Type.
Cranium. Devonian? Eastern part of Powell County,
Kentucky.
Eastman, Amer. Journ. Sci. (4), III, 1897, p. 85, text fig., pl. 1.
4058. *Trichophanes foliarum* Cope. Type.
Anterior half of skeleton and reverse on slabs. Oligocene.
South Park, Colorado.
Cope, Bull. U. S. Geol. and Geogr. Surv. Terr., IV, 1878, p. 73;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 753, pl. 69, fig. 4.
4060. *Trichophanes hians* Cope. Type.
Skeleton on slab. Oligocene. Osino, Nevada.
Cope, Proc. Amer. Philos. Soc., XII, 1872, p. 481; Rept. U. S. Geol.
Surv. Terr., III, 1884, p. 753, pl. 69, fig. 3.

MAMMALS.

2145. *Aceratherium acutum* Marsh. Type.
Skull. Republican River (Upper Miocene). Quarry E,
near Long Island, Kansas.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 335, text figs. 3, 4.
= *Teleoceras fossiger*.
138. *Aceratherium nebrascensis* (Leidy). Type and paratype.
139. Leidy, Proc. Acad. Nat. Sci. Phila., 1851, p. 331.
= *Hyracodon nebrascensis*.
See *Rhinoceros nebrascensis*.

114. **Aceratherium occidentale** (Leidy). Type.
Leidy, Proc. Acad. Nat. Sci. Phila., 1851, p. 331.
= *Cænopus occidentalis*.
See *Rhinoceros occidentalis*.
523. **Ælurodon ferox** Leidy. Type.
Upper sectorial. Loup Fork (Upper Miocene). Niobrara
River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 22; Journ. Acad. Nat.
Sci. Phila. (2), VII, 1869, pp. 68, 367, pl. 1, figs. 13, 14.
= *Ælurodon sævus*.
127. **Ælurodon haydeni** (Leidy). See *Canis (Epicyon) haydeni*.
523. **Ælurodon sævus** (Leidy). See *Ælurodon ferox* and *Canis*
128. *sævus*.
2040. **Ælurodon ursinus** (Cope). See *Canis ursinus*.
2137. **Allacodon fortis** Marsh. Type.
Upper premolar. Laramie (Cretaceous). Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 255, pl. 7, fig. 4.
2138. **Allacodon pumilis** Marsh. Type.
Three upper teeth. Ceratops beds (Cretaceous). Wyoming.
Marsh, Amer. Journ. Sci. (3), XXXVIII, 1889, p. 179; XLIII, 1892,
p. 255, pl. 7, fig. 3.
2144. **Allacodon rarus** Marsh. Type.
Upper molar. Cretaceous. Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 256, pl. 7, fig. 5.
2679. **Allodon fortis** Marsh. Paratypes.
2680. (1) Lower incisor; (2) left upper maxillary containing
three premolars associated with fragments of skull.
Morrison (Jurassic). Como Bluffs, Wyoming.
Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 331, pl. 7, (1)
figs. 14, 15; (2) figs. 11-13.
2681. **Allodon laticeps** Marsh. Plesiotypes.
2682. (1) Upper jaw containing m^1 and three premolars; (2) left
upper jaw with last premolar and two molars. Mor-
rison (Jurassic). Como, Wyoming.
Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 331, pl. 7, (1)
figs. 5, 6; (2) figs. 3, 4.
4289. **Allops crassicornis** Marsh. Type.
Skull. White River (Oligocene). South Dakota.
Marsh, Amer. Journ. Sci. (3), XLII, 1891, p. 268.—Osborn, Bull.
Amer. Mus. Nat. Hist., XVI, 1902, p. 102.
= *Titanotherium crassicornis*.
4251. **Allops serotinus** Marsh. Type.
Skull. White River (Oligocene). Bad Lands, South
Dakota.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 331.—Osborn,
Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 102.
= *Titanotherium serotinum*.

2329. *Ambloctonus sinus* Cope. Type.
 Portion of right maxillary containing crowns and roots of last three molars (m^1 - m^3) with other portions of the skull, including portion of left maxillary containing canine and last molar of left side, associated with portion of left lower jaw containing crowns and roots of last three molars (m_1 - m_3) and fragments of limb bones apparently of the same individual. Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 8; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 91, pl. 33, figs. 1-10.—Osborn and Wortman, Bull. Amer. Mus. Nat. Hist., IV, No. 1, 1892, p. 99, text fig. 5E, pp. 106, 107, text fig. 8.
5377. *Ambloctonus sinus* Cope. Paratype.
 Portion of right lower jaw containing last three molars (m_1 - m_3). Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 8; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 91, pl. 33, fig. 11.
658. *Amphicyon vetus* (Leidy). Type.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 32, 369, pl. 1, figs. 1, 2, 3.
 = *Daphœnus vetus*.
573. *Anchitherium (Hypohippus) affinis* Leidy. Type.
 Upper milk molar. Loup Fork (Upper Miocene). Niobrara River, Fort Niobrara, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 26.
 = *Hypohippus affinis*.
5393. *Anchitherium agreste* Leidy. Type.
 Portion of lower jaw containing three teeth, p_1 , m_1 , m_2 . Lower Miocene. Red Rock Creek, head of Jefferson Fork, Missouri River, Montana.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 251, pl. 7, figs. 16, 17.
2359. *Anchitherium bairdii* (Leidy). Type.
 Leidy, Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, p. 67, pl. 10, fig. 24; pl. 11, figs. 6, 7.
 = *Mesohippus bairdii*.
 See *Palæotherium bairdii*.
567. *Anchitherium (Parahippus) cognatus* Leidy. Type.
 Three right upper milk molars, dp^3 - dp^4 , associated with right lower milk molar, dp_3 . Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 26.
 = *Parahippus cognatus*.

774. **Aphelops crassus** (Leidy). See *Rhinoceros crassus*. (Also catalogue numbers 775, 805, 5392.)
3161. **Aphelops fossiger** Cope. Plesiotypes.
Teeth and various bones of skeletons. Pliocene. Williston, Levy County, Florida.
Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 41, pl. 8, figs. 1-12, 14; pl. 9; pl. 11, figs. 1, 2, 5-10; pl. 12; pl. 13, figs. 1-5; pl. 14, figs. 1-7; pl. 15, figs. 1-8.
= *Aphelops proterus*.
(See also catalogue numbers 3162-3169, 3176, 3178-3189, 3191-3193, 3276-3279, 3321, 3371, 3374, 3375, 3405, 3406, 3411, 3594-3596, 3611, 3613, 3616, 3617, 3676, 3678, 3682-3687, 3701-3706, 3715.)
3190. **Aphelops fossiger** Cope. Plesiotype.
Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 41, pl. 9, fig. 14.
= *Aphelops proterus*.
See *Rhinoceros proterus*.
115. **Aphelops jemezianus** Cope. Type.
Portion of right lower jaw containing three molars (m_1 - m_3).
"Loup Fork" (Miocene). Near Santa Clara, New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 260; Rept. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 319, pl. 73, figs. 3, 4; pl. 74, fig. 4.
3280. **Aphelops longipes** (Leidy). See *Rhinoceros longipes* and 3376. *Aphelops malacorhinus*.
3280. **Aphelops malacorhinus** Cope. Plesiotypes.
3376. Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 45, pl. 11, fig. 11; pl. 13, figs. 6, 7.
= *Aphelops longipes*.
See *Rhinoceros longipes*.
3234. **Aphelops malacorhinus** Cope. Plesiotypes.
to Teeth and limb bones of various individuals. Pliocene.
3239. Williston, Levy County, Florida.
3369. Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 45, pl. 10, figs. 11-16; pl. 11, figs. 3, 4; pl. 14, fig. 2; pl. 16, figs. 5-10.
3370. = *Aphelops longipes*.
3554.
3610.
5482.
3177. **Aphelops meridianus** (Leidy). See *Rhinoceros meridianus*.
3190. **Aphelops proterus** (Leidy). See *Rhinoceros proterus* and *Aphelops fossiger*.
3229. **Aphelops** sp. undet.
to Teeth of various individuals. Pliocene. Levy County,
3233. Florida.
Leidy and Lucas, Trans. Wagner Free Inst. Sci., IV, 1896, pl. 10, figs. 1-10.

146. **Archæotherium mortoni** Leidy. Plesiotype.
Greater portion of skull and lower jaws containing parts of both milk and adult dentition. White River (Oligocene). South Dakota.
Leidy, Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 558, pl. 10, figs. 1-3; Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, p. 57, pl. 8; pl. 9, figs. 1, 2, 5; pl. 10, figs. 1-7.
= *Elotherium mortoni*.
783. **Archæotherium robustum** Leidy. Type.
Fragments of two lower molars and part of canine. White River (Oligocene). South Dakota.
Leidy, Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 572; Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, p. 66, pl. 10, figs. 8-13.
= *Elotherium mortoni*.
See *Arctodon* sp. undet.
783. **Arctodon** sp. undet.
Molars and fragment of canine. White River (Oligocene). South Dakota.
Leidy, Proc. Acad. Nat. Sci. Phila., V, 1851, p. 278.
= *Elotherium mortoni*.
See *Archæotherium robustum*.
2862. **Asthenodon segnis** Marsh. Cotype.
Portion of left lower jaw containing incisors, canine, and two premolars. Morrison (Jurassic). Como, Wyoming.
Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 336, pl. 9, fig. 6.
3649. **Auchenia major** Leidy. Type.
Right astragalus. Pliocene. Levy County, near Archer, Florida.
Leidy, Proc. Acad. Nat. Sci. Phila., 1886, p. 11.
= *Procamelus major*.
3435. **Auchenia minimus** Leidy. Type.
Right astragalus. Pliocene. Archer, Alachua County, Florida.
Leidy, Proc. Acad. Nat. Sci. Phila., 1886, p. 11.
= *Procamelus minimus*.
3354. **Auchenia minor** Leidy. Type.
Right astragalus. Pliocene. Levy County, Florida.
Leidy, Proc. Acad. Nat. Sci. Phila., 1886, p. 11.
= *Procamelus minor*.
4676. **Basilosaurus cetoides** (Owen). Plesiotype.
Pelvic girdle and right femur. Eocene. Cocoa, Alabama.
Lucas, Proc. U. S. Nat. Mus., XXIII, 1900, p. 327, pls. 5-7.

1121. **Bathmodon cuspidatus** Cope. Type.
Portion of last lower molar in fragment of jaw. Wasatch
(Eocene). New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 30.
= *Coryphodon cuspidatus*.
111. **Bathmodon elephantopus** Cope. Type.
Skull and lower jaws. Wasatch (Eocene). Gallinas
River, New Mexico.
Cope, App. FF₃ Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. 2, 1874, p. 598; App. LL Ann. Rept. Chief Engineers,
Rept. Geogr. Surv. W. 100th Merid., 1875, p. 1015, pls. 5, 6.
= *Coryphodon elephantopus*.
2614. **Bathmodon latidens** Cope. Type.
Lower jaws with nearly complete dentition, portion of left
premaxillary containing three incisors and canine, asso-
ciated with atlas and sternum. Wasatch (Eocene).
Gallinas Creek, New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 29.
= *Coryphodon latidens*.
1119. **Bathmodon molestus** Cope. Type.
Large portion of skull and lower jaws with complete denti-
tion, associated with fore and hind limbs with feet,
cervical vertebræ, scapula, and pelvic bones. Wasatch
(Eocene). New Mexico.
Cope, App. FF₃ Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 597.
= *Coryphodon molestus*.
2616. **Bathmodon simus** Cope. Type.
Premaxillary bone, portion of left upper jaw containing six
teeth, with portions of both rami of lower jaws con-
taining teeth. Wasatch (Eocene). Gallinas River,
New Mexico.
Cope, App. FF₃ Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 596.
= *Coryphodon simus*.
2139. **Batodon tenuis** Marsh. Type.
Imperfect lower jaw containing canine and three premolars.
Ceratops beds (Cretaceous). Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 258, pl. 11, fig. 5.
1584. **Bison crassicornis** Richardson. Plesiotype.
Left horn core and part of skull. Pleistocene. Yukon or
Kotlo River, Alaska.
Lucas, Proc. U. S. Nat. Mus., XXI, 1899, pls. 73, 74.
1719. **Bison crassicornis** Richardson? Plesiotype.
Right metacarpal. Pleistocene. Yukon River, Alaska.
Lucas, Proc. U. S. Nat. Mus., XXI, 1899, pl. 83.

1989. **Bison latifrons** (Harlan). Plesiotype.
Right metacarpal. Pliocene. Peace River, Florida.
Lucas, Proc. U. S. Nat. Mus., XXI, 1899, pl. 83.
4157. **Bison occidentalis** Lucas. Type.
Cranium and horn core. Pleistocene. Fort Yukon, Alaska.
Lucas, Science (2), VIII, 1898, p. 678; Proc. U. S. Nat. Mus., XXI,
1899, p. 758, pl. 65.
2360. **Blastomeryx gemmifer** Cope. See *Dicrocerus gemmifer*.
4941. **Brontops dispar** Marsh. Type.
Skull and lower jaws with complete dentition. White River
(Oligocene). South Dakota.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 328, text figs. 7, 8.
= *Megacerops dispar*.
4258. **Brontops dispar** Marsh. Paratype.
Skull. White River (Oligocene). South Dakota.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 327, text figs. 5, 6.
= *Megacerops brachycephalus*.
4944. **Brontops validus** Marsh. Type.
Skull. White River (Oligocene). South Dakota.
Marsh, Amer. Journ. Sci. (3), XLII, 1891, p. 269.
= *Megacerops dispar*.
4273. **Brontotherium hypoceras** (Cope). Plesiotype.
Skull. White River (Oligocene). Bad Lands, South Da-
kota.
Osborn, Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 106, text fig. 11.
4249. **Brontotherium leidyi** Osborn. Type.
Osborn, Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 105, text figs. 9, 10.
See *Menops varians*.
4256. **Brontotherium medium** (Marsh). See *Titanops medius*.
114. **Cænopus occidentalis** (Leidy). See *Rhinoceros occidentalis*
and *Aceratherium occidentale*.
1017. **Calamodon arcamœnus** Cope. Type.
Portions of right and left mandibular ramus containing teeth,
associated with fragments of incisors and two molars.
Wasatch (Eocene). New Mexico.
Cope, App. FF, Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 594; Rept. U. S. Geogr. Surv. W. 100th Merid.,
IV, Pt. II, 1877, p. 163, pl. 42, figs. 1-5.
1014. **Calamodon arcamœnus** Cope. Paratypes.
1015. (1) Lower incisor associated with skeletal fragments; (2)
portion of lower incisor. Wasatch (Eocene). New
Mexico.
Cope, App. FF, Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 594; Rept. U. S. Geogr. Surv. W. 100th
Merid., IV, Pt. II, 1877, p. 163, (1) pl. 41, figs. 13-17; (2) pl.
44, figs. 1-1c.

1102. **Calamodon novomehicanus** Cope. Type.
Superior incisor. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 594.
= *Ectagonus novomehicanus*.
1012. **Calamodon simplex** Cope. Type.
Parts of molar and lower incisor. Wasatch (Eocene). New
Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 593; Rept. U. S. Geogr. Surv. W. 100th Merid.,
IV, Pt. II, 1877, p. 166, pl. 44, figs. 3, 4.
1001. **Calamodon simplex** Cope. Paratypes.
1011. (1) Teeth including incisors and molars, associated with por-
tions of limb bones; (2) portion of incisor. Wasatch
(Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 593; Rept. U. S. Geogr. Surv. W. 100th Merid.,
IV, Pt. II, 1877, p. 166, (1) pl. 43; (2) pl. 44, figs. 2-2c.
1006. **Calamodon** sp. undet.
Upper molar (worn). Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl.
44, figs. 6-6c.
1008. **Calamodon** sp. undet.
Part of lower incisor. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl.
44, figs. 7-7b.
154. **Camelops kansanus** Leidy. See *Megalomeryx niobrarenensis*
155. and *Procamelus?* niobrarenensis.
127. **Canis (Epicyon) haydeni** Leidy. Type.
Part of right ramus of jaw containing two premolars, p_3 , p_4 ,
and sectorial (m_1). Loup Fork (Upper Miocene).
Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 21; Journ. Acad. Nat.
Sci. Phila. (2), VII, 1869, p. 30, pl. 1, fig. 10.
= *Ælurodon haydeni*.
128. **Canis sævus** Leidy. Type.
Part of left ramus of jaw containing two molars, m_1 , m_2 ,
Loup Fork (Upper Miocene). Niobrara River,
Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 21; Journ. Acad. Nat.
Sci. Phila. (2), VII, 1869, pp. 28, 368, pl. 1, fig. 9.
= *Ælurodon sævus*.
768. **Canis temerarius** Leidy. Type.
Part of upper jaw containing part of sectorial and m_1 , and
fragment of lower jaw containing sectorial (m_1). Loup
Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 21; Journ. Acad. Nat.
Sci. Phila. (2), VII, 1869, pp. 29, 368, pl. 1, fig. 12.

2040. **Canis ursinus** Cope. Type.
 Right lower jaw containing m_2 , fragment of sectorial, and fragments of all the canines and premolars. "Loup Fork" (Miocene). New Mexico.
 Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 256; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 304, pl. 69, figs. 1, 1c.
 = *Ælurodon ursinus*.
126. **Canis vafer** Leidy. Type.
 Right and left rami of jaw containing nearly all the teeth. Loup Fork. (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 21; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 29, 368, pl. 1, fig. 11.
1181. **Castor (Eucastor) tortus** Leidy. Type.
 Anterior part of upper jaw containing p^4 , m^1 , and m^2 of both sides and broken incisors. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 23; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 341, pl. 26, figs. 21, 22 (as *Castor tortus*).
 = *Dipoides tortus*.
149. **Cervus warreni** Leidy. Cotypes.
 794. (1) Antler. (2) Fragment of left lower jaw containing four teeth, p_4 - m_3 . Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 23; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 172, 379, pl. 27, fig. 12.
 (1) = *Merycodus necatus* Leidy.
 (2) = *Palæomeryx* sp. undet. (fide J. W. Gidley).
2132. **Cimolodon agilis** Marsh. Type.
 Penultimate left lower molar in jaw. Ceratops beds (Cretaceous). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 255, pl. 6, fig. 8.
 = *Cimolomys agilis*.
2132. **Cimolomys agilis** (Marsh). See *Cimolodon agilis*.
2878. **Cimolomys anceps** (Marsh). See *Oracodon anceps*.
2140. **Cimolomys gracilis** Marsh. Type.
 Upper molar. Ceratops beds (Cretaceous). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XXXVIII, 1889, p. 84, pl. 2, figs. 1-4.
1121. **Coryphodon cuspidatus** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 206, pl. 46, fig. 1.
 See *Bathmodon cuspidatus*.

111. **Coryphodon elephantopus** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 217, pl. 50, figs. 5, 6; pls. 51-54, fig. 1.—Osborn, Bull. Amer.
Mus. Nat. Hist., X, 1898, p. 196, text fig. 19; p. 200, text fig.
See *Bathmodon elephantopus*.
2615. **Coryphodon elephantopus** (Cope). Plesiotype.
Left premaxillary. Wasatch (Eocene). Gallinas River,
New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 217, pl. 50, fig. 7.
2614. **Coryphodon latidens** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 214, pls. 48-50, figs. 1-4.
See *Bathmodon latidens*.
1119. **Coryphodon molestus** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 229, pls. 56, 57, figs. 1, 2.
See *Bathmodon molestus*.
2610. **Coryphodon obliquus** Cope. Type.
Fragments of lower jaw with last two molars and canine.
Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 207, pl. 47, figs. 1-3.
1032. **Coryphodon radians** (Cope). Plesiotypes.
1034. (1) Lower teeth associated with skull and jaw fragments;
2611. (2) upper and lower teeth; (3) lower molar, m₁, upper
premolar, p₁, and lower canine and incisor. Wasatch
(Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p.
211, pl. 47, (1) figs. 11-13; (2) figs. 4-6; (3) figs. 7-10.
2616. **Coryphodon simus** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 225, pl. 55, figs. 1-4.
See *Bathmodon simus*.
2617. **Coryphodon simus** (Cope). Plesiotype.
Portion of right lower jaw containing two teeth, p₁ and m₁,
associated with fragments of limb bones. Wasatch
(Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 225, pl. 55, figs. 5-10.
2621. **Coryphodon No. I** Cope.
Portions of atlas, scapula, ulna, and radius, associated with
two carpals and two metacarpals. Wasatch (Eocene).
Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 237, pl. 57, figs. 3-7, pl. 58, figs. 1-7.

2622. **Coryphodon No. II** Cope.
Fragments of skeleton including many foot bones. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 241, pl. 58, fig. 9; pl. 59; pl. 60, figs. 1-12.
2623. **Coryphodon No. III** Cope.
Nearly complete right fore foot, portions of radius and ulna, centra of vertebra, and other fragments. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 247, pl. 61, figs. 1-15.—Osborn and Wortman, Bull. Amer. Mus. Nat. Hist., IV, 1892, p. 121, fig. 14.
2036. **Coryphodon No. IV** Cope.
Lumbar vertebræ, astragalus, and fragments of femur and humerus. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 248, pl. 62; pl. 63, figs. 1-4.
2619. **Coryphodon** sp. undet.
Portion of scapula. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 63, fig. 5.
5415. **Coryphodon** sp. undet.
Right ilium and ischium. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 64, figs. 1, 2.
2037. **Coryphodon** sp. undet.
Right femur. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 64, fig. 4.
2626. **Coryphodon** sp. undet.
Distal end of radius associated with jaw and other skeletal fragments. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 64, fig. 5.
2625. **Coryphodon** sp. undet.
Distal end of radius associated with other skeleton fragments. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 64, fig. 6.
2620. **Coryphodon** sp. undet.
Portion of scapula. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 63, fig. 6.

2627. **Coryphodon** sp. undet.
Scaphoid. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 61, fig. 16.
2038. **Coryphodon** sp. undet.
Calcaneum and astragalus. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 60, fig. 13.—Osborn, Bull. Amer. Mus. Nat. Hist., X, 1898, p. 211, text fig. 26 A-C.
2639. **Coryphodon** sp. undet.
Tibia. Wasatch (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 54, fig. 4.
148. **Cosoryx furcatus** Leidy. Type.
Portion of antler. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 173, pl. 28, fig. 8.
= *Merycodus furcatus*.
5390. **Cosoryx ramosus** Cope. Type.
Portion of lower jaw containing five teeth, p_3 - m_3 . Santa Fe (Miocene). New Mexico.
Cope, Pal. Bull., No. 18, 1874, p. 148; Proc. Acad. Nat. Sci. Phila., XII, 1874, p. 148.
= *Merycodus ramosus*.
See *Dicrocerus necatus*.
2044. **Cosoryx teres** Cope. Type.
Frontal bone with portions of both antlers. "Loup Fork" (Miocene). Valley of the Rio Grande.
Cope, Proc. Acad. Nat. Sci. Phila., 1874, p. 150.
= *Palæomeryx teres*.
See *Dicrocerus teres*.
1125. **Creodus incertæ sedis No. I** Cope.
Portion of left lower jaw without teeth, associated with skeleton bones, including portions of vertebræ, end of scapula, and portions of humerus, ilia, femora, and tibia. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 127, pl. 37, Figs. 23-31.
1123. **Creodus incertæ sedis No. II** Cope.
Upper molar (? m^1), associated with bones of skeleton, including three cervical vertebræ, two dorsal vertebræ, two caudal vertebræ, parts of both humeri, and parts of radii and ulnæ. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 129, pl. 37, figs. 10-22.

2684. **Ctenacodon potens** Marsh. Paratype.
Left lower jaw containing teeth. Morrison (Jurassic).
Como, Wyoming.
Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 333, pl. 8, figs.
7-9.
658. **Daphœnus vetus** Leidy. Type.
Posterior portion of cranium, fragment of left upper jaw
containing posterior three molars, part of left lower
jaw containing three molars (m_1 - m_3) and fangs of last
premolar, and right lower sectorial in fragment of jaw.
White River (Oligocene), South Dakota.
Leidy, Proc. Acad. Nat. Sci. Phila., VI, 1853, p. 393.
See *Amphicyon vetus*.
1098. **Diacodon alticuspis** Cope. Type.
Right lower jaw containing one premolar (p_1) and three
molars (m_1 - m_3), associated with upper premolar. Wa-
satch (Eocene). New Mexico.
Cope, Syst. Cat. Eocene New Mexico, 1875, p. 12; Rept. U. S.
Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 132, pl. 45,
fig. 19.
1126. **Diacodon celatus** Cope. Type.
Left lower jaw containing last three molars. Wasatch
(Eocene). New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 12; Rept. U. S.
Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 133, pl. 45,
fig. 20.
525. **Dicotyles** sp. undet.
Upper canine. Loup Fork (Upper Miocene). Niobrara
River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 200, pl. 28,
fig. 3.
1036. **Dicrocerus furcatus** (Leidy). Plesiotype.
Portions of both lower jaws containing p_1 and all the molars
of both sides and left p_3 . "Loup Fork" (Miocene).
Valley of the Rio Grande.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 350, pl. 82, figs. 1, 1a.
= *Merycodus furcatus*.
1144. **Dicrocerus furcatus** (Leidy). Plesiotypes
1146 Portions of antlers of various individuals. "Loup Fork"
to (Miocene). Valley of the Rio Grande.
1150. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II,
2046. p. 350, pl. 80, figs. 1-7; pl. 81, fig. 5.
= *Merycodus furcatus*.
2360. **Dicrocerus gemmifer**
Last right lower jaw
F
Cope
=

5390. **Dicrocerus necatus** (Leidy). Plesiotype.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 356, pl. 82, fig. 5.
= *Merycodus ramosus*.
See *Cosoryx ramosus*.
2029. **Dicrocerus necatus** (Leidy). Plesiotypes.
2032. (1) Right and left antlers complete and fragment of left
2033. lower jaw containing three teeth; (2) portion of right
antler; (3) portion of right antler with portion of
frontal bone. "Loup Fork" (Miocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 353; (1) pl. 81, figs. 2, 3; pl. 82, fig. 2; (2) pl. 81, fig. 6; (3)
pl. 81, fig. 5.
= *Merycodus necatus*.
2030. **Dicrocerus necatus** (Leidy). Plesiotype.
Fragment of lower jaw containing last molar and distal end
of metapodial; portion of left upper maxillary contain-
ing three teeth, p^4-m^3 and part of m^3 ; portion of right
antler. "Loup Fork" (Miocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 353, pl. 81, fig. 4; pl. 82, figs. 3, 4.
= *Merycodus necatus*.
1035. **Dicrocerus tehuanus** Cope. Type.
Right lower jaw with three premolars (p_2-p_4) and one molar
(m_1). "Loup Fork" (Miocene). Valley of the Rio
Grande.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 359, pl. 82, fig. 10.
= *Merycodus tehuanus*.
1037. **Dicrocerus tehuanus** Cope? Paratypes.
5391. (1) Portion of left lower jaw containing three teeth, p_4-m_3 ;
(2) portion of right lower jaw containing four teeth,
 p_4 to m_3 . "Loup Fork" (Miocene). Valley of the
Rio Grande, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV., Pt. II, 1877,
p. 359, pl. 82, (1) fig. 11, (2) fig. 12.
= *Merycodus tehuanus*.
2044. **Dicrocerus teres** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pp. 347, 356, pl. 81, fig. 7, pl. 82, figs. 6, 6a.
= *Palæomeryx teres* (fide J. W. Gidley).
See *Cosoryx teres*.

1031. **Dicrocerus trilateralis** Cope. Type.
 1145. Portions of pelvis, sternum, and fragment of horn, associated with portions of the mandible containing teeth and fragments of ribs. "Loup Fork" (Miocene). Valley of the Rio Grande.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 357, pl. 81, fig. 8, pl. 82, figs. 7-9.
 = ? *Merycodus trilateralis*.
2880. **Didelphops comptus** (Marsh). Plesiotypes.
 2881. Right upper molar and exterior portion of right upper premolar. Ceratops beds (Cretaceous). Converse County, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, pl. 10, figs. 1, 2.
2883. **Didelphops ferox** (Marsh). Plesiotype.
 Right lower jaw. Ceratops beds (Cretaceous). Converse County, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, pl. 9, figs. 7, 8.
2882. **Didelphops** sp. undet.
 Lower molar. Ceratops beds (Cretaceous). Converse County, Wyoming.
 Marsh, Amer. Journ. Sci. (3) XLIII, 1892, pl. 11, fig. 9.
1092. **Didymictis protenus** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV., Pt. II, 1877, p. 123, pl. 39, figs. 2-6.
 = *Viverravus protenus*.
 See *Limnocyon protenus*.
1088. **Didymictis protenus** (Cope). Plesiotypes.
 to (1) Portion of left lower molar; (2) left lower jaw containing five teeth, p_3 - m_3 ; (3) right lower jaw containing last molar; (4) portion of left lower jaw containing last molar. Wasatch (Eocene). Gallinas Creek, New Mexico.
 1091. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 123, pl. 39, (1) fig. 9; (2) fig. 1, 1a; (3) fig. 8; (4) figs. 7-7b.
 = *Viverravus protenus*.
3957. **Dinictis major** Lucas. Type.
 Skull and lower jaws with portions of skeleton. Lower Miocene. Bird Cage Gap, Bad Lands of Western Nebraska.
 Lucas, Amer. Journ. Sci. (4), VI, 1898, p. 399.
4212. **Dinoceras distans** Marsh. Plesiotype.
 Top of cranium. Eocene. Barrel Springs, Wyoming.
 Marsh, Mon. X, U. S. Geol. Surv., 1886, p. 14, fig. 4, p. 15, fig. 8.
1181. **Dipoides tortus** (Leidy). See *Castor (Eucastor) tortus*.

2727. **Dryolestes vorax** Marsh. Type.
 Nearly complete lower jaw with teeth. Morrison (Jurassic). Como, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XVIII, 1879, p. 215; XXXIII, 1887, pl. 9, figs. 3, 4.
1137. **Ectagonus gliriformis** Cope. Type.
 Portions of teeth associated with other fragments. Eocene. New Mexico.
 Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y. War, II, Pt. II, 1874, p. 592; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 160, pl. 41, figs. 1-7.
1102. **Ectagonus novomehicanus** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 159, pl. 40, figs. 34-39.
 See *Calamodon novomehicanus*.
189. **Elephas columbi** Falconer. Plesiotype.
 Left ramus. Pliocene. Peace Creek, Florida.
 Leidy, Trans. Wagner Free Inst. Sci. Phila., II, 1889, pl. 8, fig. 2.
185. **Elephas imperator** Leidy. Type.
 Fifth upper molar. Pliocene. Nebraska River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 10; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 255, pl. 25, fig. 3.
146. **Elotherium mortoni** (Leidy). See *Archæotherium mortoni*.
524. **Elotherium mortoni** (Leidy)? Plesiotype.
 Incisor tooth. White River (Oligocene). Twenty miles southeast of Cheyenne, Wyoming.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, pl. 7, figs. 28, 29.
783. **Elotherium mortoni**. See *Arctodon* sp. undet. and *Archæotherium robustum*.
2129. **Ennacodon affinis** (Marsh). See *Enneodon affinis*.
2130. **Ennacodon crassus** (Marsh). See *Enneodon crassus*.
2129. **Enneodon affinis** Marsh. Type.
 Left ramus of jaw. Morrison (Jurassic.) Wyoming.
 Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 339.
 = *Ennacodon affinis*.
2130. **Enneodon crassus** Marsh. Type.
 Right ramus of jaw containing seven teeth. Morrison (Jurassic.) Wyoming.
 Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 339, pl. 10, fig. 4.
 = *Ennacodon crassus*.
1079. **Eohippus angustidens** (Cope). See *Orohippus angustidens* and *Hyracotherium angustidens*.

1060. *Eohippus index* (Cope). See *Hyracotherium angustidens*
and *Orohippus angustidens*.
1081.
1087.
1128. *Eohippus lewii* (Cope). See *Orotherium lewii*.
667. *Equus excelsus* Leidy. Type.
Fragment of right maxillary containing four teeth, p^4 - m^1 .
Pleistocene. Niobrara River, near Hay Springs, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 26; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 266, 400, pl. 27, fig. 37.
666. *Equus excelsus* Leidy. Plesiotype.
Last lower molars of right side m_2 , m_3 . Pleistocene. Pawnee
Loup of Platte River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 268, pl. 19,
fig. 34.
619. *Equus* (*Protohippus*) *perditus* Leidy. Type.
Part of jaw and four upper teeth (p^4 - m^1). Loup Fork
(Upper Miocene). Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 26.
= *Protohippus perditus*.
1180. *Erethizon venustum* (Leidy). See *Hystrix* (*Hystriopsis*) *venustum*.
1104. *Esthonyx acer* Cope. Type.
Portion of right lower jaw containing four teeth, p_1 - m_4 .
Wasatch (Eocene). New Mexico.
Cope, App. FF₁ Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 594.
= *Esthonyx bisulcatus*.
1103. *Esthonyx bisulcatus* Cope. Type.
Lower jaw containing three molars, associated with two
incisors. Wasatch (Eocene). New Mexico.
Cope, App. FF₁ Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 594; Rept. U. S. Geogr. Surv. W. 100th Merid.,
IV, Pt. II, 1877, p. 154, pl. 40, figs. 27-30.
1104. *Esthonyx bisulcatus* Cope. Plesiotype.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 154, pl. 40, figs. 31-31b.
See *Esthonyx acer*.
1130. *Esthonyx bisulcatus* Cope. Plesiotypes.
5376. (1) Lower molar of left side; (2) fragment of right lower
jaw containing one molar. Wasatch (Eocene). New
Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 154, pl. 40, (1) fig. 33; (2) fig. 32, 32a.

1105. **Esthonyx burmeisteri** Cope. Type.
Right lower jaw containing last molar. Wasatch (Eocene).
New Mexico.
Cope, App. FF, Ann. Rept. Chief Engineers, in Rept. Sect'y War,
II, Pt. II, 1874, p. 595; Rept. U. S. Geogr. Surv. W. 100th Merid.,
IV, Pt. II, 1877, p. 156, pl. 40, fig. 26.
1024. **Eumys loxodon** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 300, pl. 69, fig. 15.
= *Peromyscus loxodon*.
See *Hesperomys loxodon*.
3288. **Eusyodon maximus** Leidy. Type.
Imperfect lower canine. Pliocene. Williston, Levy County,
Florida.
Leidy, Proc. Acad. Nat. Sci. Phila., 1886, p. 37, text figs. 1, 2.
= *Teleoceras fossiger*.
125. **Felis augustus** Leidy. Type.
Upper sectorial and p³ in fragment of maxillary. Loup Fork
(Upper Miocene). Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1872, p. 39; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 227, 315, pl. 7, fig. 19.
147. **Felis augustus** Leidy. Paratypes.
5448. (1) Distal end of right humerus; (2) premaxillary contain-
ing upper incisor. Loup Fork (Upper Miocene).
Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1872, p. 39; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 227, 315 (1), pl. 20, fig. 24; (2) pl. 7,
fig. 18.
875. **Graphiodon vinearius** Leidy. Type.
Tooth. Miocene. Gay Head, Martha's Vineyard, Massa-
chusetts.
Leidy, Proc. Acad. Nat. Sci., Phila., 1870, p. 122; Rept. U. S. Geol.
Surv. Terr., I, 1873, p. 337, pl. 22, fig. 7.
1106. **Heptodon singularis** (Cope). See *Hyrachyus singularis*.
1024. **Hesperomys loxodon** Cope. Type.
Right lower jaw containing three molars. "Loup Fork"
(Miocene). New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1874, p. 150.
= *Peromyscus loxodon*.
See *Eumys loxodon*.
584. **Hipparion affine** Leidy. Type.
Upper molars. Loup Fork (Upper Miocene). Niobrara
River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 286, 402,
pl. 18, figs. 20-23.
= *Neohipparion affine*.

585. **Hipparion affine** Leidy. Paratype.
Last upper molar, m^3 , of left side. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 286, 402, pl. 18, fig. 24.
= Neohipparion affine.
562. **Hipparion affine** Leidy? Plesiotype.
Series of lower teeth of right side, p_2 to m_3 . Loup Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 317, pl. 19, fig. 3.
= Neohipparion affine?
587. **Hipparion gratum** Leidy. Cotypes.
5445 (1) Right upper premolar, p^a , associated with last upper
to molar; (2) right upper molar, ? m^3 ; (3) right and left
5447. last upper molars; (4) right upper molar, ? m^1 . Loup
Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 287, pl. 18,
figs. (1) 25, 26; (2) 27; (3) 28, 29; (4) 30.
= Neohipparion gratum.
624. **Hipparion gratum** Leidy? Plesiotype.
Series of lower teeth of right side, p_2 - m_3 . Loup Fork
(Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 318, pl. 19,
fig. 6.
= Neohipparion gratum?
3306. **Hipparion ingenuum** (Leidy). See *Hippotherium ingenuum*
3308. and *Hippotherium gratum*.
3326.
3292. **Hipparion plicatile** (Leidy). See *Hippotherium plicatile*.
(Also catalogue numbers 3293-3398, 3309, 3315, 3317, 3319.)
588. **Hipparion speciosum** Leidy. Plesiotypes.
590. (1) Four upper teeth, p^2 - p^1 of left side and p^3 of right side;
(2) three upper cheek teeth of left side, p^3 , p^3 , and
 m^2 ; (3) three upper cheek teeth of right side. Loup
Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 282-285, pl.
18, (1) figs. 7-10; (2) figs. 6, 11, 12; (3) figs. 13-15.
589. **Hipparion speciosum** Leidy? Plesiotype.
Series of lower teeth of right side, p_2 - m_3 . Loup Fork
(Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 318, pl. 19,
fig. 4.
598. **Hipparion speciosum** Leidy. Plesiotypes.
Four isolated molars. Loup Fork (Upper Miocene).
Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 320, pl. 19,
figs. 19-22.

2573. **Hipparion speciosum** Leidy. See *Hippotherium speciosum*.
601. **Hipparion** sp. undet.
 Various lower molars of different individuals. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 322, pl. 19, figs. 30-36.
599. **Hipparion** sp. undet.
 Three upper milk molars, all of right side (three individuals). Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 289, pl. 18, figs. 34-36.
 = *Neohipparion* sp. undet.
596. **Hipparion** sp. undet.
 Two upper teeth, m^3 right, and p^3 or p^4 , left. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 18, figs. 21, 33.
 = *Neohipparion* sp. undet.
574. **Hipparion** sp. undet.
575. Second and fourth upper milk molars. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 291, pl. 18, figs. 37, 38.
 = *Neohipparion* sp. undet.
3757. **Hipposyus formosus** Leidy. Type.
 First and second upper left molars. Bridger (Eocene). Near Fort Bridger, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1872, p. 37; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 90, pl. 6, fig. 41.
3750. **Hipposyus robustior** (Leidy). Type.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 93, pl. 6, fig. 40.
 See *Notharctus robustior*.
2572. **Hippotherium calamarium** Cope. Type.
 Palate with teeth and fragments of lower jaw. Middle Miocene. Pojuaque, near Santa Fé, New Mexico.
 Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 259; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 321, pl. 75, figs. 1, 2, 2a.
 = *Merychippus calamarium*.
3306. **Hippotherium gratum** Leidy. Plesio-type.
 Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, Pt. II, 1896, p. 49, pl. 19, figs. 9, 10.
 = *Hipparion ingenuum*.
 See *Hippotherium ingenuum*.

3308. **Hippotherium gratum** (Leidy). Plesiotypes.
 3326. Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 49, pl. 18,
 figs. 15, 16.
 = *Hipparion ingenuum*.
 See *Hippotherium ingenuum*.
3306. **Hippotherium ingenuum** Leidy. Type.
 Second upper molar, associated with last upper molar. Pliocene. Archer, Florida.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1885, p. 33, text fig.; Trans.
 Wagner Free Inst. Sci. Phila., II, 1889, pp. 20, 21, text fig., pl.
 3, fig. 3.
 = *Hipparion ingenuum*.
 See *Hippotherium gratum*.
3308. **Hippotherium ingenuum** Leidy. Plesiotypes.
 3326. (1) Proximal phalanx; (2) left astragalus. Pliocene. (1)
 Peace Creek, Florida; (2) Archer, Florida.
 Leidy, Trans. Wagner Free Inst. Sci. Phila., II, 1889, p. 20, pl. 3,
 (1) fig. 2; (2) fig. 4.
 = *Hipparion ingenuum*.
 See *Hippotherium gratum*.
3304. **Hippotherium montezumæ** Leidy. Type.
 Upper molar. Santa Fe marls (Upper Miocene). Lacual-
 tipan, Hidalgo, Mexico.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1882, p. 291, text fig.; Trans.
 Wagner Free Inst. Sci. Phila., II, 1889, pp. 21, 22, text fig., pl.
 5, fig. 10.
 = *Neohipparion montezumæ*.
3302. **Hippotherium montezumæ** Leidy. Paratypes.
 3303. (1) Proximal end of metatarsal, (2) proximal end of first
 phalanx. Santa Fe marls (Upper Miocene). Lacual-
 tipan, Hidalgo, Mexico.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1882, p. 291; Trans. Wagner
 Free Inst. Sci. Phila., II, 1889, p. 21, pl. 5, (1) figs. 5, 6; (2)
 fig. 7.
 = *Neohipparion montezumæ*.
3292. **Hippotherium plicatile** Leidy. Type.
 Upper right molar. Pliocene. Levy County, Florida.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1887, p. 309, text fig.—Cope,
 Proc. Amer. Philos. Soc., 1889, p. 444, fig. 6.—Lucas, Trans.
 Wagner Free Inst. Sci. Phila., IV, 1896, p. 50, pl. 19, figs. 1, 2.
 = *Hipparion plicatile*.
3309. **Hippotherium plicatile** Leidy. Paratype.
 Three lower molars. Pliocene. Levy County, Florida.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1887, p. 309.
 = *Hipparion plicatile*.

3315. **Hippotherium plicatile** Leidy. Plesiotypes.
 3317. (1) Left metatarsal; (2) proximal phalanx; (3) astragalus;
 3319. (4) right radius; (5) left radius and ulna; (6) right
 3293 tibia; (7) metatarsal; (8) proximal end of metacarpal;
 to (9) proximal median phalanx of fore foot. Pliocene.
 3298. Levy County, Florida.
 Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 50, pl. 18,
 (1) fig. 12; (2) fig. 11; (3) fig. 14; (4) pl. 19, fig. 3; (5) fig.
 4; (6) fig. 5; (7) fig. 6; (8) pl. 18, fig. 13; pl. 19, fig. 7; (9) pl.
 19, fig. 8.
 = *Hipparion plicatile*.
3299. **Hippotherium princeps** Leidy. Type.
 Third upper right premolar. Pliocene. Levy County,
 Florida.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1890, p. 182.—Lucas, Trans.
 Wagner Free Inst. Sci. Phila., IV, 1896, p. 49, pl. 19, figs. 12, 13.
 = *Neohipparion princeps*.
2573. **Hippotherium speciosum** (Leidy). Plesiotype.
 Fragment of upper jaw containing five teeth, p^3 - m^3 . Mid-
 dle Miocene. Pójuaque, New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 322, pl. 75, figs. 3, 3a.
 = *Hipparion speciosum*.
151. **Homocamelus caninus** Leidy. Type.
 Portions of anterior part of cranium containing incisor,
 canine, and three premolars, p^1 - p^3 . Loup Fork (Upper
 Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 158. pl. 14,
 figs. 16, 17.
 = *Procamelus occidentalis*.
99. **Hoplophoneus primævus** (Leidy and Owen). See *Machairodus*
primævus.
134. **Hyænodon cruentus** Leidy. Type.
 Portion of left lower jaw containing broken canine, two
 premolars (p_3 , p_4) and last molar (m_3). White River
 (Oligocene). White River, South Dakota.
 Leidy, Proc. Acad. Nat. Sci. Phila., VI, 1853, p. 393; Journ. Acad.
 Nat. Sci. Phila. (2), VII, 1869, pp. 47, 369, pl. 5, figs. 10, 11.
144. **Hyænodon horridus** Leidy. Type.
 Skull and lower jaw containing nearly complete dentition.
 White River (Oligocene). White River, South Dakota.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1853, p. 392; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 39, 369, pl. 3.
1176. **Hyopsodus paulus** Leidy. Type.
 Part of right lower jaw containing three molars (m_1 - m_3).
 Eocene. Smiths Fork, Green River, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 110; Rept. U. S. Geol.
 Surv. Terr., I, 1873, pp. 75, 320, pl. 6, figs. 1, 2.

573. **Hypohippus affinis** (Leidy). Type.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 311, 402,
 pl. 21, figs. 11, 12.
 See Anchitherium (*Hypohippus*) *affinis*.
110. **Hyrachyus agrarius** Leidy. Type.
 Left ramus of jaw without teeth. Bridger (Eocene).
 Smiths Fork, Green River, Wyoming.
 Leidy, Prel. Rept. Geol. Surv. Wyoming, etc., 1871, p. 357; Rept.
 U. S. Geol. Surv. Terr., I, 1873, pp. 60, 327, pl. 2, fig. 11.
660. **Hyrachyus agrarius** Leidy. Plesiotype.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 60, 327, pl. 2, fig. 12
 (originally described as *H. agrestis*).
 See *Hyrachyus agrestis*.
660. **Hyrachyus agrestis** Leidy. Type.
 Portion of left lower jaw containing three teeth, dp_1 , dp_4 ,
 m_1 . Bridger (Eocene). Blacks Fork, Green River,
 Wyoming.
 Leidy, Prel. Rept. Geol. Surv. Wyoming, etc., 1871, p. 357.
 = *Hyrachyus agrarius*.
661. **Hyrachyus modestus** (Leidy). Type.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 67, pl. 2, fig. 13.
 See *Lophiodon modestus*.
1106. **Hyrachyus singularis** Cope. Type.
 Right maxillary bone containing two premolars (p^2 , p^3),
 and three molars (m^1 - m^3), associated with part of max-
 illary of opposite side containing p^4 - m^3 . Wind River
 (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 19; Rept. U. S.
 Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 267, pl. 66,
 fig. 17.
 = *Heptodon singularis*.
138. **Hyracodon nebrascensis** (Leidy). Type and paratype.
 139. Leidy, Proc. Acad. Nat. Sci. Phila., 1856, p. 92.
 See *Rhinoceros nebrascensis* and *Aceratherium nebras-*
censis.
1079. **Hyracotherium angustidens** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 265, pl. 66, figs. 3, 3a.
 = *Eohippus angustidens*.
 See *Orohippus angustidens*.

1060. **Hyracotherium angustidens** (Cope). Plesiotypes.
 1080. (1) Portion of left lower jaw containing three molars, m_1 - m_3 ,
 1081. associated with upper jaw containing teeth of both sides;
 1087. (2) last two upper molars of right side, m^2 and m^3 ;
 (3) portion of left lower jaw containing two premolars,
 p_3 and p_4 ; (4) fragment of left lower jaw containing
 three teeth, p_4 , m_1 , and part of m_2 . Wasatch (Eocene).
 New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 265, pl. 66, (1) figs. 1, 2; (2) figs. 4, 4a; (3) fig. 5; (4) fig. 6.
 = *Eohippus* index.
1002. **Hyracotherium (Pliolophus) cristonense** (Cope). Type.
 Wortman, Bull. Amer. Mus. Nat. Hist., VIII, 1896, p. 102, text fig.
 11, pl. 2, fig. 1.
 = *Orotherium cristonense*.
1077. **Hyracotherium cuspidatum** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 pp. 262, 267, pl. 65, fig. 18.
 = *Orohippus cuspidatus*.
1064. **Hyracotherium tapirinum** (Cope). Cotypes.
 1076. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 1086. p. 263, pl. 66, figs. 12-16.
 = *Orohippus tapirinus*.
1057. **Hyracotherium vasacciensis** (Cope). Plesiotypes.
 1073. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 1074. p. 264, pl. 66, figs. 7-11.
 = *Orohippus vasacciensis*.
1180. **Hystrix (Hystricops) venustus** Leidy. Type.
 Two molars. Loup Fork (Upper Miocene). Niobrara River,
 Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 22; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 343, 407, pl. 26, figs. 23, 24.
 = *Erethizon venustus*.
2142. **Laodon venustus** Marsh. Type.
 Left lower jaw containing three premolars and six molars.
 Morrison (Jurassic). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 337, pl. 9, fig. 5.
157. **Leptomeryx evansi** Leidy. Type.
 Imperfect cranium, part of right ramus. White River
 (Oligocene). White River, South Dakota.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1853, p. 394; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 165, 383, pl. 14, figs. 1-8.

1092. **Limnocyon protenus** Cope. Type.
Portions of both lower jaws containing teeth, associated with portion of ilium, end of tibia, right astragalus, distal end of radius, and fragments. Wasatch (Eocene). Gallinas River, New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 608.
= *Viverravus protenus*.
See *Didymictis protenus*.
661. **Lophiodon modestus** Leidy. Type.
Left upper molar. Bridger (Eocene). Smiths Fork, Green River, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 109; *ibid.*, 1872, p. 20.
= *Hyrachyus modestus*.
3753. **Lophiotherium sylvaticum** Leidy. Type.
Fragments of left side of lower jaw containing one premolar (p₄) and two molars (m₁, m₂). Bridger (Eocene). Henrys Fork, Green River, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 126; Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 69, 327, pl. 6, figs. 33-35.
= *Orohippus sylvaticus*.
662. **Lutra piscinaria** Leidy. Type.
Right tibia. Pliocene. Sinker Creek, Idaho.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 230, pl. 31, fig. 4.
115178. **Lutreola macrodon** Prentiss. Type.
Portion of skull. Pleistocene. Brooklin, Hancock County, Maine.
Prentiss, Proc. U. S. Nat. Mus., XXVI, 1903, p. 887, text fig. a.
99. **Machiarodus primævus** Leidy and Owen. Type.
Cranium and broken jaw. White River (Oligocene). Bad Lands, South Dakota.
Leidy and Owen, Proc. Acad. Nat. Sci. Phila., 1851, p. 329.—Leidy, Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 354, pl. 12a, fig. 5; Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, pp. 95, 115, pl. 18, figs. 1-3.
= *Hoplophoneus primævus*.
1038. **Martes nambianus** Cope. Type.
Fragment of lower jaw containing two premolars (p₃, p₄) and sectorial (m₁). Santa Fé marls (Miocene). New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1874, p. 147.
= *Putorius nambianus*.
See *Mustela nambianus*.
184. **Mastodon andium** Cuvier. Plesiotype.
Portion of jaw and symphysis containing parts of three teeth. Pleistocene. Chile.
Wyman, U. S. Naval Astr. Exped. to Southern Hemisphere, II, 1855, pl. 12, figs. 1, 2.

3066. **Mastodon floridanus** Leidy. Type.
 Posterior portion of last left lower molar, associated with first and second left upper molars, probably of the same individual. Pliocene. Williston, Levy County, Florida.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1886, p. 11.—Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 15, pl. 1, figs. 1, 3; pl. 5, fig. 4.
3057. **Mastodon floridanus** Leidy. Plesiotypes.
 Teeth of various individuals. Pliocene. Williston, Levy County, Florida.
 Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, p. 15, pls. 1-7.
 (See also catalogue numbers 3058-3065, 3067, 3069-3081, 3083-3085, 3101, 3110, 3115.)
209. **Mastodon mirificus** Leidy. Type.
 Portion of left lower jaw containing last molar. Loup Fork (Upper Miocene). Fort Niobrara, Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 10; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 249, 396, pl. 25, figs. 1, 2.
426. **Mastodon obscurus** Leidy. Type.
 Posterior half of last molar. Pliocene? Tarboro, North Carolina.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 247, 396, pl. 27, fig. 16.
2346. **Mastodon productus** Cope. Type.
 Nearly complete lower jaws containing fifth and sixth molars of each side and two tusks. "Loup Fork" (Miocene). New Mexico.
 Cope, Proc. Acad. Nat. Sci. Phila., 1874, p. 221; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 306, pl. 70, figs. 1, 2; pl. 71, fig. 3.
- 4168 **Mastodon productus** Cope. Plesiotypes.
 to Teeth and bones of various individuals. "Loup Fork"
 4173. (Miocene). Near Ildefonso, New Mexico.
 4179. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 306, pl. 71, figs. 1, 2, 4-9; pl. 72, figs. 2-2d.
4261. **Megacerops brachycephalus** Osborn. Type.
 Skull. White River (Oligocene). Bad Lands, between Cheyenne and White rivers, South Dakota.
 Osborn, Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 97.
4258. **Megacerops brachycephalus** Osborn. Paratype.
 Osborn, Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 97, text figs. 3, 4.
 See Brontops dispar.
4941. **Megacerops dispar** (Marsh). Type.
 Osborn, Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 98.
 See Brontops dispar.

4944. **Megacerops dispar** (Marsh). See *Brontops validus*.
154. **Megalomeryx niobrarensis** Leidy. Cotypes.
 155. Teeth. Loup Fork (Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 24; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 161, 382, pl. 14, figs. 12, 13.
 = *Camelops kansanus*.
 See *Procamelus?* *niobrarensis*.
830. **Megatherium mirabile** Leidy. Cotypes.
 832. Anterior part of jaw, posterior part of cranium, and astragalus. Pleistocene. Skiddaway Island, Georgia.
 837. Leidy, Proc. Acad. Nat. Sci. Phila., VI, 1852, p. 117; Smithsonian Contrib. to Knowl., VII, Art. V, 1855, p. 49, pl. 15.
2131. **Menacodon rarus** Marsh. Type.
 Left ramus of jaw with four premolars and three molars. Morrison (Jurassic). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 340, pl. 10, fig. 5.
2885. **Meniscoëssus cœlatus** (Marsh). See *Tripriodon cœlatus*.
1093. **Meniscotherium chamense** Cope. Type.
 Part of upper right maxillary containing one broken premolar (p^4), and three molars (m^1 - m^3). Eocene. New Mexico.
 Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y. War, II, Pt. II, 1874, p. 596; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 252, pl. 66, fig. 18.
4249. **Menops varians** Marsh. Paratype.
 Skull. Lower beds, White River (Oligocene). Bad Lands, between Cheyenne and White rivers, South Dakota.
 Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 329, text fig. 10.
 = *Brontotherium leidyi*.
2572. **Merychippus calamarium** (Cope). See *Hippotherium calamarium*.
578. **Merychippus insignis** Leidy. Plesiotypes.
 583. (1) Two upper molars, m^2 and m^3 , of right side; (2) fragment of maxillary of right side containing six teeth, p^2 - m^3 . Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 296, (1) pl. 18, figs. 49, 50; (2) pl. 17, fig. 5.
569. **Merychippus mirabilis** Leidy. Type.
 Upper milk molars (dp^3 , dp^4) and first molar (m^1). Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 27; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 299, pl. 17, figs. 10-13.
 = *Protohippus mirabilis*.

580. **Merychippus mirabilis** Leidy. Paratype.
 Portion of right maxillary containing four teeth p^4 - m^3 .
 Loup Fork (Upper Miocene). Niobrara River,
 Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 27; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, p. 299, pl. 17, figs. 8, 9.
 = *Protohippus mirabilis*.
571. **Merychippus mirabilis** Leidy. Plesiotypes.
 572. (1) Last right upper molar, m^3 ; (2) last upper molar of left
 581. side; (3) two upper premolars of right side, p^3 and p^2 ;
 582. (4) right upper premolar, p^2 . Loup Fork (Upper
 Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 299, (1) pl.
 18, fig. 55; (2) fig. 56; (3) pl. 17, fig. 14; (4) fig. 15.
 = *Protohippus mirabilis*.
2574. [**Merychippus** sp. undet.]
 Fragment of right lower jaw with five teeth, p_3 - m_3 . Middle
 Miocene. Pojuaque, New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl.
 75, figs. 4, 5 (unnamed).
 [Identified by J. W. Gidley.]
120. **Merychys elegans** Leidy. Cotypes.
 121. Right and left upper and lower jaws containing almost
 complete dentition. Loup Fork (Upper Miocene).
 Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 25; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 118, 380, pl. 11, figs. 1-11.
439. **Merychys major** Leidy. Type.
 Part of right upper jaw containing third and fourth premo-
 lars and first and second molar. Loup Fork (Upper
 Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 26; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 121, 380, pl. 11, figs. 15, 16.
118. **Merychys medius** Leidy. Type.
 Fragment of left side of lower jaw containing three molars.
 Loup Fork (Upper Miocene). Niobrara River,
 Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 26; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 119, 121, 380, pl. 11, figs. 12-14.
156. **Merycochærus proprius** Leidy. Type.
 Upper and lower jaws containing nearly complete dentition.
 Lower Miocene. Near Fort Laramie, Niobrara River,
 Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 24; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 110, 380, pl. 10, figs. 1-4.
445. **Merycochærus proprius** Leidy. Paratype.
 Last left upper molar. Lower Miocene. Near Fort Laramie,
 Niobrara River, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 24; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 110, 380, pl. 10, fig. 5.

145. **Merycochærus rusticus** Leidy. Type.
Portion of cranium and lower jaw of left side containing complete dentition. Pliocene. Sweetwater River, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 109; Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 199, 319, pl. 3, figs. 1-3.
442. **Merycochærus rusticus** Leidy. Paratypes.
532. Various teeth and bones of skeletons. Miocene. Sweet-
535-537. water River, Wyoming.
913. Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 109; Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 199, 319, pl. 7, figs. 1-5; pl. 20, figs. 9-11, 15.
530. **Merycochærus** sp. undet.?
Distal end of tibia. Pliocene. Sweetwater River, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 208, pl. 20, fig. 12
148. **Merycodus furcatus** (Leidy). See *Cosoryx furcatus*.
1036. **Merycodus furcatus** (Leidy). See *Dicrocerus furcatus*.
(Also catalogue numbers 1144, 1146-1150, 2046.)
5385. **Merycodus necatus** Leidy. Plesiotype.
435. Right side of lower jaw containing five teeth, p_3-m_1 ; first premolar. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 162, pl. 14, figs. 9, 10.
149. **Merycodus necatus** Leidy. See *Cervus warreni*.
- 2029 **Merycodus necatus** Leidy. See *Dicrocerus necatus*.
to
2033.
5390. **Merycodus ramosus** (Cope). See *Cosoryx ramosus* and *Dicrocerus necatus*.
1035. **Merycodus tehuanus** (Cope). See *Dicrocerus tehuanus*.
400-1037.
5391.
1031. **Merycodus trilateralis** (Cope). See *Dicrocerus trilateralis*.
1145.
2359. **Meshippus bairdii** (Leidy). See *Palæotherium bairdii* and *Anchitherium bairdii*.
1633. **Mesoteras kerrianus** Cope. Type.
Fragment of cranium and jaw. Miocene. Banks of Omanky Creek, Halifax County, North Carolina.
Cope, Amer. Nat., IV, 1870, p. 128.
1178. **Microsus cuspidatus** Leidy. Type.
Part of left lower jaw containing last two molars. Bridger (Eocene). Black Fork of Green River, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 113; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 81, pl. 6, figs. 10, 11.

1038. **Mustela nambianus** (Cope). Type.
Cope, App. LL, Ann. Rept. Chief Engineers, 1875, p. 68.
= *Putorius nambianus*.
See *Martes nambianus*.
806. **Myiodon harlani** Owen. Plesiotypes.
807. (1) First upper molar; (2) first lower molar; (3) phalanx;
818. (4) tibia. Pliocene. Petite Anse Island, Louisiana.
821. Leidy, Proc. Acad. Nat. Sci. Phila., 1885, pp. 49-51, text figs.;
Trans. Wagner Free Inst. Sci. Phila., II, 1889, pp. 33-37, text
figs.; pl. 5, (1) fig. 4; (2) fig. 3; (3) fig. 2; (4) fig. 1.
562. **Neohipparion affine** (Leidy)? See *Hipparion affine*?
584. **Neohipparion affine** (Leidy). See *Hipparion affine*.
585.
587. **Neohipparion gratum** (Leidy). See *Hipparion gratum*.
(Also catalogue numbers 5445-5457.)
624. **Neohipparion gratum** (Leidy)? See *Hipparion gratum*?
- 3302 **Neohipparion montezumæ** (Leidy). See *Hippotherium*
to *montezumæ*.
3304.
3299. **Neohipparion princeps** (Leidy). See *Hippotherium princeps*.
574. **Neohipparion** sp. undet. See *Hipparion* sp. undet.
596. **Neohipparion** sp. undet. See *Hipparion* sp. undet.
599. **Neohipparion** sp. undet. See *Hipparion* sp. undet.
603. [**Neohipparion**? sp. undet.]
Miscellaneous lot of seven lower molars. Loup Fork (Upper
Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 19, figs. 2,
7-10 (unnamed).
[Identified by J. W. Gidley.]
605. [**Neohipparion**? sp. undet.]
Two lower milk molars, dp_3 and dp_4 of left side in a frag-
ment of jaw, associated with milk molars of two other
individuals, dp_4 left and dp_4 right. Loup Fork (Upper
Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 19, figs. 37,
38, 41 (unnamed).
[Identified by J. W. Gidley.]
602. [**Neohipparion** sp. undet.]
Last lower molar, m_3 . Loup Fork (Upper Miocene). Nio-
brara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 19, fig. 15
(unnamed).
[Identified by J. W. Gidley.]

600. [**Neohipparion**? sp. undet.]
 Three lower teeth (representing three individuals). Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 19, figs. 25-27 (unnamed).
 [Identified by J. W. Gidley.]
597. [**Neohipparion** sp. undet.]
 Lower molar of right side. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 19, fig. 40 (unnamed).
 [Identified by J. W. Gidley.]
3750. **Notharctus robustior** Leidy. Type.
 Part of left lower jaw with second molar. Bridger (Eocene). Henrys Fork, Green River, Wyoming.
 Leidy, Rept. U. S. Geol. Surv. Montana, etc. (Hayden), 1872, p. 264.
 = *Hipposyus robustior*.
3752. **Notharctus tenebrosus** Leidy. Type.
 Nearly complete lower jaw containing all the teeth except p₁ and the incisors. Bridger (Eocene). Blacks Fork, Green River, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 113; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 86, pl. 6, figs. 36, 37.
2878. **Oracodon anceps** Marsh. Paratype.
 ? Lower premolar. Ceratops beds (Cretaceous). Converse County, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 256, pl. 7, fig. 7.
 = *Cimolomys anceps*.
2141. **Oracodon conulus** Marsh. Type.
 Upper premolar. Ceratops beds (Cretaceous). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 256, pl. 7, fig. 8.
137. **Oreodon culbertsonii** Leidy. Plesiotype.
 Cranium and jaw. White River (Oligocene). Nebraska.
 Leidy, Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 548, pl. 10, figs. 5, 6; Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, p. 45, pl. 2, fig. 3.
2506. **Oreodon culbertsonii** Leidy. Plesiotype.
 Cranium and jaw. White River (Oligocene). Nebraska.
 Leidy, Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, p. 45, pl. 2, figs. 1, 2.
136. **Oreodon gracilis** Leidy. Plesiotype.
 Cranium and jaw. White River (Oligocene). Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 94, pl. 6, figs. 2, 3.

1079. **Orohippus angustidens** Cope. Type.
 Portion of left lower jaw containing three molars, m_1 - m_3 .
 Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 22.
 = *Eohippus angustidens*.
 See *Hyracotherium angustidens*.
1077. **Orohippus cuspidatus** Cope. Type.
 Fragment of maxillary bone containing two molars (m^1 , m^2).
 Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 22.
 See *Hyracotherium cuspidatum*.
3753. **Orohippus sylvaticus** (Leidy). See *Lophiotherium sylvaticus*.
1064. **Orohippus tapirinus** Cope. Cotypes.
 1076. Fragment of right lower jaw containing two molars, m_1 , m_2 ,
 1086. associated with jaws, teeth, and skeleton bones of vari-
 ous individuals. Wasatch (Eocene.) New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 20.
 See *Hyracotherium tapirinum*.
1057. **Orohippus vasacciensis** Cope. Plesiotypes.
 1073. Portions of lower and upper jaws containing teeth.
 1074. Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 21.
 See *Hyracotherium vasacciensis*.
1002. **Orotherium cristonense** Cope. Type.
 Both lower jaws containing nearly complete dentition.
 Wasatch (Eocene). New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 254, pl. 65, figs. 13, 14.
 See *Hyracotherium (Pliolophus) cristonense*.
1128. **Orotherium lævii** Cope. Type.
 Portion of left lower jaw containing three premolars (p_2 - p_4)
 and two molars (m_1 , m_2), associated with a similar por-
 tion of the right jaw and a portion of the right maxil-
 lary containing two premolars (p^2 , p^3). Wasatch
 (Eocene). New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 257, pl. 65, figs. 15-17.
 = *Eohippus lævii*.
1005. **Orotherium vintanum** Marsh. Plesiotypes.
 1100. (1) Left maxillary with three molars, m^1 - m^3 , and third
 premolar, associated with lower molars, m_2 , m_3 , and
 portions of the skeleton; (2) portion of right lower
 jaw containing last two molars, m_2 and m_3 . Wasatch
 (Eocene). New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV Pt. II, 1877,
 p. 255, pl. 65, (1) figs. 1-11; (2) fig. 12.

1029. **Oxyæna forcipata** Cope. Type.
Both lower jaws containing most of the teeth. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 600; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 105, pl. 36, figs. 1-6.
1047. **Oxyæna forcipata** Cope. Paratypes.
1053. (1) Fragments, including a posterior portion of lower jaw
1054. containing parts of two molars, m_2 and m_3 , anterior
1151. portion of left maxillary, and other skull portions;
(2) left lower molar and distal end of tibia, with various other fragments; (3) fragmentary lower molars and premolars; (4) part of parietal bone. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 600; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 105, (1) pl. 35, figs. 7-12; (2) pl. 37, figs. 7, 8; (3) figs. 2-5; (4) fig. 1.
1049. **Oxyæna lupina** Cope. Type.
Left maxillary containing four teeth, p^4 - m^3 , portions of both lower jaws containing teeth, two canines (fragmentary), and portion of left squamosal. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 599; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 101, pl. 35, figs. 1-4.
1050. **Oxyæna lupina** Cope. Paratypes.
1142. (1) Upper and lower teeth associated with fragments of
1143. skeleton bones; (2) anterior portion of left lower jaw containing two teeth, p_1 and m_1 ; (3) left upper premolars, p^2 - p^4 , in fragment of jaw. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 599; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 101, pl. 34, (1) figs. 14-32; (2) fig. 37; (3) figs. 34-36.
1041. **Oxyæna morsitans** Cope. Type.
Last three lower molars and canine. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 600; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 98, pl. 34, figs. 1-4.
1040. **Oxyæna morsitans** Cope. Paratypes.
1043. (1) Fragments of skull and limb bones; (2) portion of right
1044. maxillary containing two molars, m^1 and m^2 , and bone fragments; (3) fragmentary jaw containing teeth, and limb bones. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 600; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 98, pl. 34, (1) figs. 11-13; (2) fig. 10; (3) figs. 5-9 (see No. 1055, *Oxyæna* sp. undet.).

1055. *Oxyæna* sp. undet.
Distal end of femur and portion of left calcaneum. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877; pl. 35, figs. 5, 6 (perhaps same individual as No. 1044, fig'd pl. 34, figs. 5-9, fide Cope).
5378. *Oxyæna* sp. undet.
Left premaxillary and anterior portion of maxillary containing roots of canine, one premolar and two incisors. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 37, fig. 9.
5379. *Oxyæna* sp. undet.
Part of ilium. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 37, figs. 6, 6a.
1096. *Pachyæna ossifraga* Cope. Type.
First upper molar. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 601; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 94, pl. 39, fig. 10.
2044. *Palæomeryx teres* (Cope). See *Cosoryx teres* and *Dicrocerus teres*.
749. *Palæomeryx* sp. undet. See *Cervus warreni*.
758. *Palæosyops paludosus* Leidy. Cotypes.
759. Upper molar (m^3), lower molar (m_1), and last upper pre-
762. molar (p^4). Bridger (Eocene). Church Buttes, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 111; Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 28, 325, pl. 5, fig. 5; pl. 23, figs. 5, 6.
106. *Palæosyops paludosus* Leidy. Plesiotype.
Right tibia. Bridger (Eocene). Grizzly Buttes, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 43, pl. 20, fig. 1.
2359. *Palæotherium bairdii* Leidy. Type.
Part of right ramus of jaw containing five teeth. White River (Oligocene). Nebraska?
Leidy in Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 572.
= *Mesohippus bairdii*.
See *Anchitherium bairdii*.
1095. *Panolax sanctæfidei* Cope. Type.
Four imperfect molars. "Loup Fork" (Miocene). New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1874, p. 151; Rept. U. S. Geogr. Surv. W. 100th Merid., IV., Pt. II, 1877, p. 296, pl. 69, figs. 16-20.

567. **Parahippus cognatus** (Leidy). Type.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 314, pl. 21, figs. 7-10.
 See Anchitherium (Parahippus) cognatus.
1129. **Paramys buccatus** (Cope). See Plesiarctomys buccatus.
1127. **Paramys delicatior**. See Plesiarctomys delicatior.
1099. **Paramys delicatissimus** Leidy. See Plesiarctomys delicatissimus.
105. **Patriofelis ulta** Leidy. Type.
 Portions of lower jaw containing broken molars (m_1 - m_3).
 Bridger (Eocene). Near Fort Bridger, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 10; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 114, pl. 2, fig. 10.—Osborn and Wortman, Bull. Amer. Mus. Nat. Hist., IV, No. 1, 1892, p. 97, text fig. 4.
2143. **Paurodon valens** Marsh. Type.
 Left ramus of jaw with teeth. Morrison (Tertiary). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XXXIII, 1887, p. 342, pl. 10, fig. 7.
2877. **Pediomys elegans** Marsh. Paratype.
 Portion of left lower jaw containing last molar. Ceratops (Cretaceous). Converse County, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, pl. 10, fig. 7.
1024. **Peromyscus loxodon** (Cope). See Eumys loxodon and Hesperomys loxodon.
5382. **Phenacodus omnivorus** Cope. Type.
 Right upper molar, m^1 . Wasatch (Eocene). New Mexico.
 Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 599; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 179, pl. 45, fig. 6.
1004. **Phenacodus primævus** Cope. Plesiotypes.
1026. (1) Fragment of right lower jaw containing three teeth,
 5381. m_1 - m_3 ; (2) portion of left lower jaw containing four teeth, p_4 - m_3 , associated with five upper teeth, p^3 - m^3 ; (3) last lower molar of left side. Wasatch (Eocene). New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 45, (1) figs. 4, 4a; (2) figs. 1-3; (3) fig. 5.
1027. **Phenacodus sulcatus** Cope. Type.
 One left superior molar. Wasatch (Eocene). New Mexico.
 Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 599; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 179, pl. 45, figs. 7, 7a.
1129. **Plesiarctomys buccatus** Cope. Type.
 Part of cranium including right maxillary bone containing three molars. Wasatch (Eocene). New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 171, pl. 44, fig. 8.
 = Paramys buccatus.

1127. *Plesiarctomys delicatior* (Leidy). Plesiotype.
Portions of lower jaws, apparently of two individuals, associated with fragments of skeletal bones. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV., Pt. II, 1877, p. 172, pl. 44, figs. 10, 11.
= *Paramys delicatior*.
1099. *Plesiarctomys delicatissimus* (Leidy). Plesiotype.
Portion of left lower jaw containing two molars, m_1 and m_2 , and incisor. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 172, pl. 44, figs. 9, 12.
= *Paramys delicatissimus*.
2630. *Pliauchenia humphresiana* Cope. Type.
Portion of left mandible with fragmentary teeth. Santa Fé (Miocene). Pojuaque, New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 258; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 344, pl. 87, fig. 4.
2631. *Pliauchenia vulcanorum* Cope. Type.
Portion of left superior maxillary containing premolars p^3 , p^4 , and first molar, m^1 . Middle Miocene. Pojuaque, New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 259; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 345, pl. 77, fig. 5.
2632. *Pliauchenia vulcanorum* Cope? Paratype.
Portion of maxillary containing four teeth, dp^3 - dp^4 , m^1 . Santa Fe marls, "Loup Fork" (Miocene). Pojuaque, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 77, fig. 6.
3649. *Procalemus major* (Leidy). Type.
Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, pp. viii, 53, pl. 18, fig. 1.
See *Auchenia major*.
3334. *Procamelus major* Leidy. Plesiotypes.
to Teeth and various bones of skeletons. Pliocene. Levy
3340. County, Florida.
3559. Leidy and Lucas, Trans. Wagner Free Inst. Sci., IV, 1896, p. 51, pl.
3650. 17, figs. 1-16; pl. 18, figs. 2-4.
to
3652.
- Procamelus medius* Leidy and Lucas. See *Procamelus minor*.
3435. *Procamelus minimus* (Leidy). Type.
Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, pp. viii, 53, pl. 18, fig. 7.
See *Auchenia minimus*.

3359. **Procamelus minimus** (Leidy). Plesiotypes.
 3360. (1) Proximal extremity right metatarsal and metacarpal;
 3366. (2) distal extremity left radius and ulna; (3) phalanges;
 3367. (4) ungual phalanx. Pliocene. Levy County, Florida.
 Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, Pt. 2,
 1896, pl. 16, (1) figs. 1, 2; (2) fig. 3; (3) pl. 18, figs. 8, 9; (4)
 fig. 10.
3354. **Procamelus minor** (Leidy). Type.
 Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896,
 p. 54, pl. 18, fig. 5 (as *P. medius* in error).
 See *Auchenia minor*.
3351. **Procamelus minor** (Leidy). Plesiotypes.
 3368. (1) Distal end left radius and ulna; (2) proximal phalanx;
 3935. (3) upper molar, m². Pliocene. Florida.
 Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896,
 p. 54, (1) pl. 15, fig. 10; (2) pl. 18, fig. 6; (3) pl. 17, fig. 18 (as
P. medius in error).
154. **Procamelus? niobrarensis** (Leidy). Cotypes.
 155. Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 317.
 = *Camelops kansanus*.
 See *Megalomeryx niobrarensis*.
797. **Procamelus occidentalis** Leidy. Type.
 Portion of right lower jaw containing complete molar-pre-
 molar series. Loup Fork (Upper Miocene). Niobrara
 River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 23; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, p. 151, pl. 15, figs. 5, 6.
795. **Procamelus occidentalis** Leidy. Paratypes.
 798. (1) Anterior portion of lower jaw containing both canines
 and three incisors; (2) portion of palate containing
 fragmentary cheek teeth of both sides. Loup Fork
 (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 23; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, p. 151, (1) pl. 9, fig. 5; (2) pl. 15,
 fig. 7.
2128. **Procamelus occidentalis** Leidy. Plesiotypes.
 2633. (1) Skull with part of skeleton including humerus, radio-
 ulna, and part of fore foot; (2) fragmentary lower
 teeth. Santa Fé Marls, "Loup Fork" (Miocene).
 Pojuaque, New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 329, (1) pl. 53, fig. 2; pl. 76; pl. 77, figs. 1, 2; pl. 78, figs.
 1-9; pl. 79; (2) pl. 77, fig. 3.
151. **Procamelus occidentalis** Leidy. See *Homocamelus caninus*.
796. **Procamelus robustus** Leidy. Type.
 Portion of right lower jaw containing three premolars, p₁,
 p₂, p₄, and two molars, m₁, m₃. Loup Fork (Upper
 Miocene). Fort Niobrara, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 89; Journ. Acad. Nat.
 Sci. Phila. (2), VII, 1869, pp. 148, 381, pl. 15, figs. 1, 2

800. **Procamelus robustus** Leidy. Paratype.
Upper molar, m^2 . Loup Fork (Upper Miocene). Fort
Niobrara, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 89; Journ. Acad. Nat.
Sci. Phila. (2), VII, 1869, pp. 148, 381, pl. 15, fig. 3.
569. **Protohippus mirabilis** (Leidy). See *Merychippus mirabilis*.
(Also catalogue numbers 571, 572, 580-582.)
619. **Protohippus perditus** (Leidy). Type.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 275, pl. 17,
fig. 5.
See *Equus* (*Protohippus*) *perditus*.
620. **Protohippus perditus** Leidy? Plesiotypes.
629. (1) Three lower molars of right side, m_1 - m_3 ; (2) portion of
right lower jaw containing three teeth, p_1 , m_2 , m_3 .
Loup Fork (Upper Miocene). Niobrara River, Ne-
braska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 315, pl. 19,
(1) fig. 5; (2) figs. 13, 14.
621. **Protohippus placidus** Leidy. Cotypes.
623. Upper premolar, p^2 , associated with six other upper molar
625. teeth and three upper cheek teeth, p^2 right, p^2 and dp^2
2365. left. Loup Fork (Upper Miocene). Niobrara River,
Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 277, pl. 18,
figs. 39-48.
593. [? **Protohippus** sp. undet.]
Portion of left lower jaw containing four teeth, p_2 - m_1 .
Loup Fork (Upper Miocene). Niobrara River, Ne-
braska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 320, pl. 19,
fig. 12 (unnamed).
[Identified by J. W. Gidley.]
570. [? **Protohippus** sp. undet.]
Series of lower teeth of right side, p_2 - m_3 . Loup Fork
(Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pl. 19, figs.
11, 28 (unnamed).
[Identified by J. W. Gidley.]
627. [? **Protohippus** sp. undet.]
Left lower premolar, p_4 , in fragment of jaw. Loup Fork
(Upper Miocene). Niobrara River, Nebraska.
Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 315, pl. 19,
fig. 24 (unnamed).
[Probably a *Protohippus*. J. W. Gidley.]

626. [**? Protohippus** sp. undet.]
 Fragment of right lower jaw containing two molars, m_2 , m_3 ,
 Loup Fork (Upper Miocene). Niobrara River, Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 315, pl. 19,
 fig. 18 (unnamed).
 [Probably a *Protohippus*. J. W. Gidley.]
116. [**? Protohippus** sp. undet.]
 Portion of right lower jaw with symphysis, containing dp_2
 and dp_4 , p_3 - m_2 . Loup Fork (Miocene). Niobrara River,
 Nebraska.
 Leidy, Journ. Acad. Nat. Sci. Phila., (2), VII, 1869, p. 316, pl.
 19, figs. 16, 17 (unnamed).
 [Identified by J. W. Gidley].
5416. **Protohippus** sp. undet.
 Right upper molar. Middle Miocene. Pojuaque, New
 Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 323, pl. 75, figs. 7, 7a.
1111. **Prototomus hians** (Cope). Type.
 Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 290.
 =*Sinopa hians*.
 See *Stypolophus hians*.
1021. **Prototomus multicuspis** Cope. Type.
 Portion of right maxillary containing three molars (m^1 - m^3)
 and premolar (p^4). Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 10.
 =*Sinopa multicuspis*.
 See *Stypolophus multicuspis*.
1018. **Prototomus multicuspis** Cope. Paratypes.
1020. (1) Portion of lower jaw containing three molars, m_1 - m_3 ;
 (2) left lower jaw containing five teeth. Wasatch
 (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 10.
 =*Sinopa multicuspis*.
 See *Stypolophus multicuspis*.
1025. **Prototomus secundarius** Cope. Type.
 Incomplete ramus supporting four teeth. Wasatch
 (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 9.
 =*Sinopa secundarius*.
 See *Stypolophus secundarius*.
1023. **Prototomus strenuus** Cope. Type.
 Portions of both jaws containing nearly complete dentition.
 Wasatch (Eocene). New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 10.
 =*Sinopa strenuus*.
 See *Stypolophus strenuus*.

1022. **Prototomus viverrinus** Cope. Type.
Portions of skeleton including nearly complete cranium, vertebrae, parts of humerus, femur, and tibia. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Ann. Rept. Chief Engineers, in Rept. Sect'y War, II, Pt. II, 1874, p. 13.
= *Sinopa viverrinus*,
See *Stypolophus viverrinus*.
124. **Pseudaelurus intrepidus** Leidy. Type.
Complete left lower jaw containing all the teeth except one incisor. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 22; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 52, 367, pl. 1, fig. 8.
1038. **Putorius nambianus** (Cope). Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 305, pl. 69, fig. 3.
See *Martes nambianus* and *Mustela nambianus*.
775. **Rhinoceros crassus** Leidy. Type.
Fragment of upper jaw containing last molar, m³. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 28; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, pp. 228, 390, pl. 23, fig. 8.
= *Aphelops crassus*.
774. **Rhinoceros crassus** Leidy. Paratypes.
805. (1) Lateral upper incisor; (2) fragment of lower jaw containing first temporary molar, dp.; (3) right upper temporary molar, dp². Loup Fork (Upper Miocene).
5392. Niobrara River, Nebraska.
Leidy, Proc. Acad. Nat. Sci. Phila., 1858, p. 28; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 228, pl. 23, (1) figs. 6, 7; (2) fig. 9; (3) figs. 4, 5.
= *Aphelops crassus*.
3280. **Rhinoceros longipes** Leidy. Cotypes.
3376. Lower canine and left metacarpals II and IV. Pliocene.
Williston, Levy County, Florida.
Leidy, Proc. Acad. Nat. Sci. Phila., 1890, p. 183.
= *Aphelops longipes*.
See *Aphelops malacorhinus*.
3177. **Rhinoceros meridianus** Leidy. Type.
Second right upper true molar. "Loup Fork" (Miocene).
Washington County, Texas.
Leidy, Proc. Acad. Nat. Sci. Phila., 1865, p. 176; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 229, pl. 23, fig. 10.—Leidy and Lucas, Trans. Wagner Free Inst. Sci. Phila., IV, 1896, pl. 8, fig. 14.
= *Aphelops meridianus*.

138. **Rhinoceros nebrascensis** Leidy. Type and paratype.
 139. Anterior portion of skull containing complete molar-premolar dentition, associated with portion of left lower jaw containing five teeth, p_1 - m_3 . White River (Oligocene). White River, South Dakota.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1850, p. 121; Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 556, pl. 12a, fig. 6.
 = *Hyracodon nebrascensis*.
 See *Aceratherium nebrascensis*.
114. **Rhinoceros occidentalis** Leidy. Type.
 Cranium. White River (Oligocene). Bad Lands, South Dakota.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1850, p. 119; 1851, p. 276; Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 552, pl. 9, figs. 1, 2; Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, pp. 81, 114, pls. 12, 13; Journ. Acad. Nat. Sci. Phila. (2), VII, 1869, p. 220, pl. 22.
 = *Cænopus occidentalis*.
 See *Aceratherium occidentale*.
3190. **Rhinoceros proterus** Leidy. Type.
 Last left upper molar, m^3 . Pliocene. Williston, Levy County, Florida.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1885, p. 33.
 = *Aphelops proterus*.
 See *Aphelops fossiger*.
1111. **Sinopa hians** (Cope). See *Prototomus hians* and *Stypolophus hians*.
1018. **Sinopa multicuspis** (Cope). See *Prototomus multicuspis* and
 1020. *Stypolophus multicuspis*.
 1021.
1025. **Sinopa secundarius** (Cope). See *Prototomus secundarius* and *Stypolophus secundarius*.
1023. **Sinopa strenuus** (Cope). See *Prototomus strenuus* and *Stypolophus strenuus*.
1022. **Sinopa viverrinus** (Cope). See *Prototomus viverrinus* and *Stypolophus viverrinus*.
2136. **Stagodon validus** Marsh. Type.
 Anterior portion of right lower jaw containing broken canine and two premolars (p_1 , p_2). Ceratops beds (Cretaceous). Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 256, pl. 8, fig. 7.
1097. **Steneofiber pansus** Cope. Type in part.
 Fragments of incisor and limb bones. "Loup Fork" (Miocene). New Mexico.
 Cope, Proc. Acad. Nat. Sci. Phila., 1872, p. 222; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 297, pl. 69, figs. 7-12.

2041. **Steneofiber pansus** Cope. Plesiotype.
 Portion of incisor and lower molar. "Loup Fork" (Miocene). New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 297, pl. 69, figs. 13, 14.
2693. **Stylacodon gracilis** Marsh. Type.
 Left ramus containing nearly all the teeth. Morrison (Jurassic). Como, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XVIII, 1879, p. 60; XXXIII, 1887, p. 335, pl. 9, fig. 1; Mon. XXVII, U. S. Geol. Surv., 1897, p. 508, text fig. 68.
1111. **Stypolophus hians** Cope. Type.
 Many portions of skeleton including parts of skull. Wasatch (Eocene). Gallinas River, New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 72, pl. 38, figs. 12-30.
 = *Sinopa hians*.
 See *Prototomus hians*.
1021. **Stypolophus multicuspis** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pp. 112, 116, pl. 39, fig. 14.
 = *Sinopa multicuspis*.
 See *Prototomus multicuspis*.
1018. **Stypolophus multicuspis** (Cope). Paratypes.
 1020. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pp. 112, 116, pl. 39; (1) fig. 13; (2) fig. 12.
 = *Sinopa multicuspis*.
 See *Prototomus multicuspis*.
1025. **Stypolophus secundarius** Cope. Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 115.
 = *Sinopa secundarius*.
1023. **Stypolophus strenuus** Cope. Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 117, pl. 39, fig. 11.
 = *Sinopa strenuus*.
 See *Prototomus strenuus*.
1022. **Stypolophus viverrinus** (Cope). Type.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 112, pl. 38, figs. 1-11.
 = *Sinopa viverrinus*.
 See *Prototomus viverrinus*.
4711. **Symborodon? montanus** (Marsh). Plesiotype.
 Skull. White River (Oligocene). Washington County, South Dakota.
 Osborn, Bull. Amer. Mus. Nat. Hist., XVI, 1902, p. 104, text fig. 8.

2875. **Telacodon lævis** Marsh. Paratype.
Upper molar of right side. Ceratops beds (Cretaceous).
Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 258, pl. 11, fig. 1.
2133. **Telacodon præstans** Marsh. Type.
Portion of right lower jaw containing two molars. Ceratops
beds (Cretaceous). Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 258, pl. 9, fig. 4.
2886. **Telacodon præstans** Marsh. Paratype.
Lower molar. Ceratops beds (Cretaceous). Converse
County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 258, pl. 11, fig. 8.
2145. **Teleoceras fossiger** (Cope). See *Aceratherium acutum* and
3288. *Eusydon maximus*.
1211. **Titanops curtus** Marsh. Type.
Complete cranium. White River (Oligocene). Colorado.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 330, text fig. 11.
4256. **Titanops medius** Marsh. Type.
Portion of skull including horn cores and dentition complete.
White River (Oligocene). Washington County, South
Dakota.
Marsh, Amer. Journ. Sci. (3), XLII, 1891, p. 269.
= *Brontotherium medium*.
4289. **Titanotherium crassicornis** (Marsh). See *Allops crassicornis*.
4251. **Titanotherium serotinum** (Marsh). See *Allops serotinus*.
3924. **Trigonias osborni** Lucas. Type.
Anterior part of cranium, with incisors and canines. White
River (Oligocene). Bad Lands, South Dakota.
Lucas, Proc. U. S. Nat. Mus., XXIII, 1900, p. 221, text figs. 1, 2.
2885. **Tripriodon cœlatus** Marsh. PlesioType.
Right upper molar. Ceratops beds (Cretaceous). Lance
Creek, Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, pl. 5, fig. 3.
= *Meniscoëssus cœlatus*.
4214. **Ursus procerus** Miller. Type.
Skull. Pleistocene. Middletown, Ohio.
Miller, Proc. Biol. Soc. Wash., XIII, 1899, p. 55.
1092. **Viverravus protenus** (Cope). See *Limnocyon protenus* and
Didymictis protenus.
- 1088 **Viverravus protenus** (Cope). See *Didymictis protenus*.
to
1091.

REPTILES.

4213. **Acherontemys heckmani** Hay. Type.
Carapace. Roslyn (Miocene). Roslyn, Kittitas County,
Washington.
Hay, Proc. U. S. Nat. Mus., XXII, 1899, p. 23, pl. 6.
2344. **Alligator chamensis** Cope. Type.
Premaxillary. Wasatch (Eocene). New Mexico.
Cope, App. FF₃, Rept. Chief Engineers, in Rept. Sect'y War, II,
Pt. II, 1874, p. 603.
= *Crocodylus chamensis*.
4115. **Alligator heterodon** Cope. Type.
Fragments of cranium. Wasatch (Eocene). Near Black
Buttes, Wyoming.
Cope, Proc. Amer. Phil. Soc., XII, 1872, p. 544.
= *Crocodylus heterodon*.
4972. **Allosaurus medius** Marsh. Cotypes.
5452. Tooth, astragulus, and fragmentary phalanx of hind foot.
5453. Potomac (Jurassic). Prince George County, Maryland.
Marsh, Amer. Journ. Sci. (3), XXXV, 1888, p. 93.
4096. **Anosteira radulina** Cope. Type.
Anterior and posterior marginal bones. Bridger (Eocene).
Bad Lands, Hams Fork, Wyoming.
Cope, Pal. Bull. No. 9, 1872, p. 1; Proc. Amer. Phil. Soc. XII, 1872,
p. 555; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 128, pl. 18,
figs. 18, 19.
4094. **Anosteira trionchoides** Cope. Type.
Costal bone. Bridger (Eocene). Bad Lands, Cottonwood
Creek, near Fort Bridger, Wyoming.
Cope, Pal. Bull. No. 1, 1872, p. 2; Proc. Amer. Phil. Soc., XII, 1872,
p. 461.
= *Plastomenus trionchoides*.
218. **Antrodemus valens** (Leidy). See *Poicilopleuron valens*.
2315. **Antrodemus valens** (Leidy). See *Labrosaurus ferox*.
4971. **Astrodon altus** (Marsh). See *Pleurocœlus altus*.
2267. **Astrodon nanus** (Marsh). See *Pleurocœlus nanus*. (Also
catalogue numbers 4968, 4969, 4970, 5372.)
4089. **Axestemys byssinus** (Cope). See *Axestus byssinus*.
4089. **Axestus byssinus** Cope. Type.
Vertebrae, ilium, humerus, and various fragments of skele-
ton. Bridger (Eocene). Blacks Fork, Green River,
Wyoming.
Cope, Pal. Bull. No. 1, 1872, p. 3; Proc. Amer. Philos. Soc., XII,
1872, p. 462; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 116,
pl. 15, figs. 1-12.
= *Axestemys byssinus*.

103. **Baena arenosa** Leidy. Type.
Carapace and plastron. Bridger (Eocene). Junction of
Big Sandy and Green rivers, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 123; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 161, 341, pl. 13, figs. 1, 2.
974. **Baena arenosa** Leidy. Plesiotype.
Anterior part of plastron. Bridger (Eocene). Junction of
Big Sandy and Green rivers, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 161, pl. 15, figs. 4, 5.
107. **Baena arenosa** Leidy. Plesiotype.
Part of carapace and plastron. Eocene. New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
p. 52, pl. 24, fig. 32.
2275. **Baena hebraica** Cope. Type.
Posterior part of carapace and plastron. Bridger (Eocene).
Cottonwood Creek, Wyoming.
Cope, Pal. Bull. No. 1, 1872, p. 4; Proc. Amer. Phil. Soc., XII,
1872, p. 463; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 146,
pl. 19, figs. 1, 2.
4056. **Baena ponderosa** Cope. Type.
Numerous parts of carapace. Bridger (Eocene). Bad
Lands, Hams Fork, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873,
p. 624; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 150, pl. 17,
figs. 3-8.
1152. **Baptemys costilatus** (Cope). See *Dermatemys costilatus*.
4739. **Bison alticornis** Marsh. Type.
Horn cores and connecting portion of skull. Laramie (Cre-
taceous). Green Mountain Creek, near Denver, Colo-
rado.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 323, text figs. 1, 2.
= *Ceratops alticornis*.
4989. **Brachauchenius lucasi** Williston. Type.
Palatal surface of skull, mandibles, thirty-four vertebrae in
sequence with the atlas, and numerous ribs of both
sides. Fort Benton (Cretaceous). Near Ada, Ottawa
County, Kansas.
Williston, Field Columbian Mus. Pub., No. 73, Geol. Ser. II, No.
1, 1903, p. 57, pls. 24, 25.—Lucas, Smithsonian Misc. Coll.
(Quart. Issue), XLV, 1903, p. 96.
5383. **Brontosaurus excelsus** Marsh. Plesiotype.
Terminal phalanx. Morrison (Jurassic). Como, Wyo-
ming.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1,
1896, p. 174, text figs. 21-23.
4712. **Brontosaurus** sp. Plesiotype.
Cervical vertebrae. Morrison (Jurassic). Canyon City,
Colorado.
Hatcher, Mem. Carnegie Mus., II, 1903, p. 75.
See *Diplodocus longus*.

4287. *Brontosaurus* sp. See *Diplodocus longus*.
2210. *Camptosaurus nanus* Marsh. Type.
Left fore leg, associated with vertebrae, pelvis, limb bones, and a portion of the feet. Morrison (Jurassic). Eight miles east of Como, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLVIII, 1894, p. 85, pl. 5, fig. 3; Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. I, 1896, p. 196, pl. 55, fig. 2.
2592. "Carnivorous dinosaurian" Cope.
Tooth. Triassic. Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geol. Surv. W. Iooth Merid., IV, Pt. II, 1877, pl. 22, fig. 15.
4739. *Ceratops alticornis* (Marsh). Type.
Marsh, Amer. Journ. Sci. (3), XXXVIII, 1889, p. 174.—Barbour, Amer. Nat., XXIII, 1890, p. 392, figs. 5, 6.—Marsh, Mon. XXVII, U. S. Geol. Surv., 1897, p. 512, figs. 79, 80.
See *Bison alticornis*.
2411. *Ceratops montanus* Marsh. Type.
Horn cores and basioccipital. Judith River (Cretaceous). Twelve miles above mouth of Cow Creek, Missouri River, Montana.
Marsh, Amer. Journ. Sci. (3), XXXVI, 1888, p. 477, pl. 11, figs. 1, 2; Sixteenth Ann. Rept. U. S. Geol. Surv., 1894-5, Pt. I, 1896, p. 216, pl. 63, figs. 1-3.
4802. *Ceratops montanus* Marsh. Plesiotype.
Squamosal. Judith River (Cretaceous). Cow Island, Montana.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. I, 1896, pl. 63, fig. 6.
5457. *Ceratops paucidens* (Marsh). Type.
Marsh, Amer. Journ. Sci. (3), XXXIX, 1890, p. 83.
See *Hadrosaurus paucidens*.
4735. *Ceratops nasicornis* Marsh. Type.
Skull and large portion of the skeleton. Morrison (Jurassic). Canyon City, Colorado.
Marsh, Amer. Jour. Sci. (3), XXVII, 1884, p. 330, pl. 8, figs. 9, 10, pl. 10, fig. 5; XXVIII, 1884, p. 161, fig. 1; XLIV, 1892, p. 347, pl. 7; Geol. Mag., London, Dec. 3, X, 1893, p. 153, pl. 6; Amer. Journ. Sci. (3), L, 1895, p. 494; Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. I, 1896, pp. 156, 162, figs. 4, 5, p. 236, figs. 64, 65, pls. 8, 9, 10, fig. 1, pl. 14; Compte rendu des seances du troisieme Congres International de Zoologie, Leyden, 1895, p. 202, text figs. 9, 10, pl. 1, fig. 5; Mon. U. S. Geol. Surv., XXVII, 1897, p. 503, text. fig. 60, pl. 25, fig. 60.
2414. *Claosaurus annectens* Marsh. Type.
Very complete skeleton. Laramie (Cretaceous). Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 453, fig. 4; XLIV, 1892, pp. 171, 344, pl. 2, pl. 3, fig. 1, pl. 6; XLV, 1893, p. 83; Geol. Mag., London, Dec. 3, X, 1893, p. 155, pl. 7; Amer. Journ. Sci. (3), XLVIII, 1894, pl. 7, fig. 5.
= *Thespesius occidentalis*.
See *Trachodon annectens*.

3814. **Claosaurus annectens** Marsh. Plesiotype.
Skull, part of the fore limbs, and impression of skin. Laramie (Cretaceous). Castle Butte, seven miles northwest of Forsyth, Montana.
Hatcher, *Annals Carnegie Mus.*, I, 1901, p. 130, fig. 1.
= *Thespesius occidentalis*.
5370. **Claosaurus annectens** Marsh. Plesiotype.
Teeth. Cretaceous. Wyoming.
Marsh, *Amer. Journ. Sci.* (3), XLV, 1893, pl. 5, figs. 1-3; *Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5*, Pt. 1, 1896, p. 221, pl. 78, figs. 2a-2c; *Mon. XXVII, U. S. Geol. Surv.*, 1897, p. 517, fig. 82.
= *Thespesius occidentalis*.
See *Trachodon annectens*.
49. **Clidastes affinis** Leidy. Cotypes.
57. Fragments of cranium, basisphenoid, humerus, and portions
63. of the lower jaws. Niobrara (Cretaceous). Smoky
69. Hill River, Kansas.
Leidy, *Rept. U. S. Geol. Surv. Terr.*, I, 1873, pp. 283, 344, pl. 34, figs. 6-9, 11.
= *Clidastes velox*.
49. **Clidastes velox** (Marsh). See *Clidastes affinis*. (Also catalogue numbers 57, 63, 69.)
4973. **Cœlurus gracilis** Marsh. Type.
Ungual phalanx. Potomac (Jurassic). Muirkirk, Prince George County, Maryland.
Marsh, *Amer. Journ. Sci.* (3), XXXV, 1888, p. 94.
5458. **Compsemys plicatulus** Cope. See *Glyptops ornatus*.
960. **Compsemys victus** Leidy. Type.
Vertebral plate, portion of the fifth costal, and a fragment of the last costal plate. Great Lignite (Cretaceous). Near Long Lake, Nebraska.
Leidy, *Proc. Acad. Nat. Sci. Phila.*, VIII, 1856, p. 312; *Trans. Amer. Phil. Soc.*, XI, 1860, p. 152, pl. 11, figs. 5, 6, 7.
2134. **Coniophis precedens** Marsh. Type.
Vertebra. Laramie (Cretaceous). Peterson's Quarry, Converse County, Wyoming.
Marsh, *Amer. Journ. Sci.* (3) XLIII, 1892, p. 450 figs. 1 a-c.
- Crocodylus**. See *Crocodylus* (Hay, *Bull. No. 179, U. S. Geol. Surv.*, 1902, p. 512).
932. **Crocodylus aptus** Leidy. Type.
Cervical vertebra. Wasatch (Eocene). South Bitter Creek, Wyoming.
Leidy, *Proc. Acad. Nat. Sci. Phila.*, 1869, p. 67; *Rept. U. S. Geol. Surv. Terr.*, I, 1873, p. 126, pl. 8, fig. 2.

2344. **Crocodylus chamensis** Cope. Type.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 67, pl. 32, figs. 11, 12.
See Alligator chamensis.
1108. **Crocodylus chamensis** Cope. Plesiotypes.
1109. (1) Frontal, parts of quadrate, lower jaws, muzzle, and dermal scuta; (2) part of frontal, vertebral column with numerous omissions, and proximal portion of femur. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 67, pl. 32, (1) figs. 1-10; (2) figs. 13-21.
4048. **Crocodylus clavis** Cope. Type.
Parts of right maxillary and premaxillary bones, part of the mandibular ramus with teeth, cervical and dorsal vertebrae. Bridger (Eocene). Mammoth Buttes, South Bitter Creek, Wyoming.
Cope, Pal. Bull. No. 6, 1872, p. 3; Proc. Amer. Philos. Soc., XII, 1872, p. 485; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 157, pl. 21, figs. 4-8.
919. **Crocodylus elliotti** Leidy. Type.
Anterior part of left maxillary. Bridger (Eocene). Junction of Big Sandy and Green rivers, Sweetwater County, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 100; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 126, pl. 8, fig. 4.
92. **Crocodylus elliotti** Leidy. Plesiotypes.
141. (1) Proximal end of right femur; (2) large portion of upper part of skull; (3) fragment of skull; (4) first lumbar vertebra. Bridger (Eocene). Little Sandy River, Wyoming.
125. (1) Proximal end of right femur; (2) large portion of upper part of skull; (3) fragment of skull; (4) first lumbar vertebra. Bridger (Eocene). Little Sandy River, Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 127, pl. 8, (1) fig. 5; (2) fig. 6; (3) fig. 7; (4) fig. 1.
2594. **Crocodylus (?) elliotti** Leidy. Plesiotypes.
2595. (1) Frontal and part of mandible with teeth; (2) fragments of jaw with teeth and various pieces of the skeleton. Bridger (Eocene). Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 65, pl. 31, (1) figs. 6, 7; (2) figs. 8-17.
2605. **Crocodylus grypus** Cope. Cotypes.
2606. Fragments of skulls, jaws, vertebrae, and fragments of limb bones. Bridger? (Eocene). Gallinas Creek, New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 32; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 63, pl. 30, figs. 1-26.
4115. **Crocodylus heterodon** (Cope). Type.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 34; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 164, pl. 23a, figs. 10-12.
See Alligator heterodon.

4117. **Crocodylus heterodon** (Cope). Plesiotype.
Dermal scuta. Bridger (Eocene). Upper Green River,
Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 164, pl. 23a, figs.
19-22.
4116. **Crocodylus heterodon** (Cope). Plesiotype.
Part of right maxillary, lumbar vertebra, caudal vertebra,
shaft of femur, and dermal scute. Bridger (Eocene).
Near Laclede, Wyoming.
Cope, Rept. U. S. Geol. Surv. Terr., III, 1884, p. 164, pl. 23a, figs.
14-18.
2624. **Crocodylus ? liodon** Marsh. Plesiotype.
Axis, vertebræ, parts of the quadrate and parietal of two
individuals. Wasatch (Eocene). Gallinas Creek, New
Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1807,
p. 67, pl. 31, figs. 18-23.
4112. **Crocodylus polyodon** (Cope). Type.
Cope, Amer. Nat., XVI, 1882, p. 981; Rept. U. S. Geol. Surv. Terr.,
III, 1884, p. 154, pl. 23a, figs. 2, 3.
See *Diplocynodus polyodon*.
4113. **Crocodylus subulatus** Cope. Type.
Dentary, articular region of the right ramus, fragment of
premaxillary, cervical, and dorsal vertebræ. Bridger
(Eocene). Upper Green River, Wyoming.
Cope, Pal. Bull. No. 9, 1872, p. 1; Proc. Amer. Phil. Soc. XII,
1872, p. 544 (as *Crocodylus* (*Ichthyosuchus*) *subulatus*); Rept.
U. S. Geol. Surv. Terr., III, 1884, p. 152, pl. 23a, figs. 4-9.
See *Diplocynodus subulatus*.
4118. **Crocodylus sulciferus** Cope. Type.
Tooth. Bridger (Eocene). Bluffs of Upper Green River,
Wyoming.
Cope, Pal. Bull. No. 9, 1872, p. 1; Proc. Amer. Phil. Soc., XII,
1872, p. 555; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 152,
pl. 23a, fig. 23.
2593. **Crocodylus wheelerii** Cope. Type.
Portions of parietal, frontal, nasal, premaxillary, quadrate,
angular, surangular, and fragment of mandible. Eocene.
Gallinas Creek, New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 33; Rept. U. S.
Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 64, pl. 31,
figs. 1-5.
931. **Crocodylus** sp. undet. ?
First caudal vertebra. Eocene. Little Sandy River,
Wyoming.
Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 133, pl. 8, fig. 3.

3903. *Cynocercus incisus* Cope? Plesiotype.
Proximal end of humerus, femur, portion of scapula, coracoid, and limb bone. Niobrara (Cretaceous). Smoky Hill River, Kansas.
Leidy, Rept. U. S. Geol. Surv. Terr. I, 1873, p. 269, pl. 36, figs. 17-21.
= *Toxochelys latiremis*.
1152. *Dermatemys costilatus* Cope. Type.
Parts of carapace. Wasatch (Eocene). New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 36; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 52, pl. 24, figs. 17-31.
= *Baptemys costilatus*.
1107. *Diplocynodon sphenops* (Cope). See *Diplocynodus sphenops*.
5364.
4112. *Diplocynodus polyodon* Cope. Type.
Dentary and posterior portion of left ramus. Bridger (Eocene). Bluffs of Upper Green River, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p. 614.
= *Crocodylus polyodon*.
1107. *Diplocynodus sphenops* Cope. Type.
Parts of frontal, parietal, articular, angular and surangular, cervical, lumbar, sacral and caudal centra. Eocene. New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 31; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 60, pl. 29, figs. 1-7.
= *Diplocynodon sphenops*.
5364. *Diplocynodus sphenops* Cope. Paratype.
Fragments of skull and mandibles, cervical, dorsal, and lumbar vertebræ, proximal extremity of humerus, and dorsal dermal bones. Eocene. New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 31; Rept. U. S. Geol. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 60, pl. 29, figs. 9-22.
= *Diplocynodon sphenops*.
4113. *Diplocynodus subulatus* (Cope). Type.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p. 613.
= *Crocodylus subulatus*.
4713. *Diplodocus longus* Marsh. Plesiotype.
Dorsal vertebræ. Morrison (Jurassic). Canyon City, Colorado.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1, 1896, pl. 27, fig. 4.

4287. *Diplodocus longus* Marsh. Plesiotype.
Right hind foot associated with femur, tibia, and fibula.
Morrison (Jurassic). Near Canyon City, Colorado.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1,
1896, p. 180, pl. 28, fig. 2.
= *Brontosaurus* sp.
4712. *Diplodocus longus* Marsh. Plesiotype.
Cervical vertebrae. Morrison (Jurassic). Canyon City,
Colorado.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1,
1896, pl. 27, fig. 3.
= *Brontosaurus* sp.
2672. *Diplodocus longus* Marsh. Plesiotype.
Skull and jaws. Morrison (Jurassic). Canyon City,
Colorado.
Marsh, Amer. Journ. Sci. (3), XXVII, 1884, pl. 3, figs. 1-3, pl. 4, fig.
1; Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1,
1896, p. 177, text fig. 27, pl. 25, pl. 76, fig. 4; Mon. U. S. Geol.
Surv., XXVII, 1897, p. 495, text fig. 44.—Hatcher, Mem.
Carnegie Mus., I, 1901, pl. 2, figs. 1-3.
5368. *Diplodocus longus* Marsh. Plesiotype.
Atlas. Morrison (Jurassic). Canyon City, Colorado.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1,
1896, pl. 27, figs. 1, 2.—Hatcher, Mem. Carnegie Mus., I, 1901,
p. 19, figs. 4, 5.
4288. *Diracodon laticeps* Marsh. Type.
Caudal vertebrae, spines, and plate. Morrison (Jurassic).
Wyoming.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 416, pl. 9; Geol.
Mag., London, Dec. 3, V, 1888, pl. 3; Sixteenth Ann. Rept. U.
S. Geol. Surv. for 1894-5, Pt. 1, 1896, p. 193, pl. 51.
2364. *Dystrophæus viæmalæ* Cope. Type.
Ulna, radius, metacarpals, and part of pubis. Jurassic.
Painted Canyon, southeastern Utah.
Cope, Proc. Amer. Phila. Soc., XVI, 1877, p. 581; Rept. U. S.
Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 34, pl. 83,
figs. 1-6.—Huene, Neues Jahrb., Beilage-Band XIX, 1904, p.
319, text figs. 4, 5, pls. 14-16.
2578. *Emys cibollensis* Cope. Type.
Portions of carapace and plastron. Wasatch (Eocene).
Gallinas River, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p.
57, pl. 27, fig. 4, pl. 28, figs. 3-6.
4125. *Emys euthneta* Cope. Cotypes.
Vertebral and marginal bones. Wasatch (Eocene). Black
Buttes, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p.
628; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 133, pl. 18, figs.
34-42.

109. **Emys haydeni** Leidy. Type.
Carapace. Bridger (Eocene). Church Buttes, Uinta
County, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 123; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 145, 340, pl. 9, fig. 6.
98. **Emys hemispherica** Leidy. Type.
Carapace and plastron. White River (Oligocene). Bad
Lands, White River, South Dakota.
Leidy, Proc. Acad. Nat. Sci. Phila., 1851, p. 173. •
= *Stylemys nebrascensis*.
See *Testudo hemispherica*.
4129. **Emys gravis** (Cope). Type.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr., for 1872, 1873, p.
626.
= *Notomorpha gravis*.
5375. **Emys jeansi** Leidy. Type.
Carapace and plastron. Bridger (Eocene). Near Fort
Bridger, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 123.
= *Emys wyomingensis*.
2576. **Emys latilabiatu**s Cope. Cotypes.
2578. Portions of carapace and plastron; anterior portion of plas-
tron. Wasatch (Eocene). Gallinas River, New
Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 36.
= *Emys lativertibralis*.
2576. **Emys lativertibralis** Cope. Cotypes.
2578. Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. 2, 1877,
p. 53, pl. 27, figs. 1-3; pl. 28, figs. 1, 2.
See *Emys latilabiatu*s.
4061. **Emys megaulax** Cope. Cotypes.
4121. (1) Vertebrae and marginal bones; (2) vertebrae and costal
bones. Wasatch (Eocene). Black Buttes, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p. 628;
Rept. U. S. Geol. Surv. Terr., III, 1884, p. 132, pl. 18, (1) figs.
26-31; (2) figs. 32, 33.
4097. **Emys polycypha** (Cope). Cotypes.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873,
pp. 625, 630; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 131,
pl. 18, figs. 20-22.
See *Palæotheca polycypha*.
4088. **Emys septaria** Cope. Type.
Portions of carapace and plastron. Bridger (Eocene).
Bad Lands, South Bitter Creek, Wyoming.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873,
p. 625; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 139, pl. 17,
figs. 9-13.

963. **Emys stevensonianus** Leidy. Cotypes.
 965. Part of carapace and portions of plastrons. Bridger
 976. (Eocene). Grizzly Buttes, near Fort Bridger, Wyoming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 5.
 = *Emys wyomingensis*.
2107. **Emys terrestris** (Cope). Type.
 Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873,
 p. 629; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 131, pl. 18,
 figs. 23-25.
 See *Palæotheca terrestris*.
4103. **Emys testudineus** (Cope). Cotypes.
 Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873,
 p. 627; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 134, pl. 23,
 figs. 12, 13.
 See *Notomorpha testudinea*.
963. **Emys wyomingensis** Leidy. Plesiotypes.
 965. Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 141, pl. 9, figs. 2-4.
 976. See *Emys stevensonianus*.
5375. **Emys wyomingensis** Leidy. Plesiotype.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, pp. 140, 142, 340, pl. 10,
 figs. 1, 2.
 See *Emys jeansi*.
5458. **Glyptops ornatus** Marsh. Type.
 Part of carapace and plastron. Morrison (Jurassic). Como,
 Wyoming.
 Marsh, Amer. Journ. Sci. (3), XL, 1890, p. 176, pl. 7; Mon. U. S.
 Geol. Surv., XXVII, 1897, p. 507, text figs. 63, 64.
 = *Compsemys plicatulus* (fide O. P. Hay).
4054. **Hadrianus allabiatius** Cope. Type.
 Portions of carapace and plastron. Bridger (Eocene). Bad
 Lands, Cottonwood Creek, Wyoming.
 Cope, Pal. Bull. No. 3, 1872, p. 3; Proc. Amer. Phil. Soc., XII, 1873,
 p. 471; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 140, pl. 15,
 figs. 13, 14, 15.
2597. **Hadrianus corsoni** (Leidy). Plesiotype.
 Fragment of right post-abdominal bone. Wasatch (Eocene).
 Gallinas Creek, New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
 p. 58, pl. 24, fig. 36.
2186. **Hadrianus octonarius** Cope. Type.
 Carapace, plastron, and limb bones. Bridger (Eocene).
 Blacks Fork of Green River, Wyoming.
 Cope, Pal. Bull. No. 2, 1872, p. 3; Proc. Amer. Phil. Soc., XII, 1873,
 p. 468; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 140, pl. 20.

4046. **Hadrianus schucherti** Hay. Type.
Carapace and imperfect plastron. Jacksonian (Eocene).
Cocoa, Alabama.
Hay, Proc. U. S. Nat. Mus., XXII, 1899, p. 22, pls. 4, 5.
2599. **Hadrianus** sp. undet.
Fragment of left post-abdominal bone. Wasatch (Eocene).
Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pl. 24, fig. 38.
2598. **Hadrianus** sp. undet.
Fragments of post-abdominal bones. Wasatch (Eocene).
Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pl. 24, fig. 37.
2600. **Hadrianus** sp. undet.
Right episternal and other fragments. Wasatch (Eocene).
Gallinas Creek, New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877,
pl. 24, fig. 39.
5457. **Hadrosaurus paucidens** Marsh. Type.
? Left maxillary associated with left squamosal. Laramie
(Cretaceous). Cow Island, Montana.
Marsh, Amer. Journ. Sci. (3), XXXIX, 1889, p. 336.
= *Ceratops paucidens*.
4136. **Heterodontosuchus ganei** Lucas. Type.
Anterior part of jaw. Triassic. Clay Hill, Henry Moun-
tain quadrangle, southern Utah.
Lucas, Amer. Journ. Sci. (4), VI, 1898, p. 399.
4457. **Isodectes punctulatus** (Cope). Plesiotype.
Partial skeleton lacking head and anterior portions. Coal
Measures. Linton, Jefferson County, Ohio.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 88, pl. 3, fig. 3.
2315. **Labrosaurus ferox** Marsh. Type.
Left dentary. Morrison (Jurassic). Colorado.
Marsh, Amer. Journ. Sci. (3), XXVII, 1884, p. 333, pl. 9, figs. 4-6.
= *Antrodemus valens*.
39. **Lestosaurus coryphæus** (Cope). Plesiotypes,
50. (1) Caudals; (2) ulna?; (3) vertebræ; (4) palate bone
62. with teeth; (5) paddle bone; (6) cervical vertebræ;
76. (7) second cervical. Niobrara (Cretaceous). Smoky
226. Hill River, Kansas.
3901. Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 276, (1) pl. 36, figs.
5365. 8-12; (2) fig. 13; (3) figs. 4, 5; (4) pl. 34, fig. 12; (5) pl. 36, fig.
14; (6) fig. 6; (7) fig. 7.

41. **Liodon dyspelor** Cope. Type.
 Vertebrae and limb bones. Niobrara (Cretaceous). Fort
 McRae, New Mexico.
 Cope, Proc. Acad. Nat. Sci. Phila., 1870, p. 132; Rept. U. S. Geol.
 Surv. Terr., II, 1875, p. 167, pl. 31, fig. 5.
 = *Tylosaurus dyspelor*.
2152. **Metoposaurus fraasi** Lucas. Type.
 Episternum. Triassic. Five miles east of Tanners Cross-
 ing, Little Colorado River, Arizona.
 Lucas, Proc. U. S. Nat. Mus., XXVII, 1904, p. 194, pl. 3.
5384. **Morosaurus agilis** Marsh. Type.
 Posterior half of skull, atlas, axis, and third cervical verte-
 bra. Morrison (Jurassic). Canyon City, Colorado.
 Marsh, Amer. Journ. Sci. (3), XXXVII, 1889, p. 334, text fig. 3;
 Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1, 1896,
 pl. 30, fig. 1.
5369. **Morosaurus agilis** Marsh. Plesiotypes.
 5371. (1) Right hind foot; (2) right fore foot associated with
 radius and ulna. Morrison (Jurassic). Canyon City,
 Colorado.
 Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, Pt. 1,
 1896, p. 182, pl. 37, (1) fig. 2, (2) fig. 1.
873. **Mosasaurus** sp. undet.
 Part of upper jaw. Cretaceous. Marion, Perry County,
 Alabama.
 Leidy, Smithsonian Contrib. to Knowl., XIV, 1865, p. 72, pl. 19, fig. 7.
4129. **Notomorpha gravis** Cope. Type.
 Marginal bones and part of plastron, associated with frag-
 ments of carapace. Green River (Eocene). Bear
 River, near Evanston, Wyoming.
 Cope, Proc. Amer. Phil. Soc., XII, 1872, p. 476; Rept. U. S. Geol.
 Surv. Terr., III, 1884, p. 143, pl. 23, figs. 14-16.
 See *Emys gravis*.
4103. **Notomorpha testudinea** Cope. Cotypes.
 Entosternal and left posterior lobe of plastron. Green
 River (Eocene). Bear River, near Evanston, Wyo-
 ming.
 Cope, Proc. Amer. Phil. Soc., XII, 1872, p. 475.
 = *Emys testudineus*.
988. **Oligosimus grandævus** Leidy. Type.
 Vertebra. Cretaceous? Henrys Fork, Green River, Wyo-
 ming.
 Leidy, Proc. Acad. Nat. Sci. Phila., 1872, p. 39; Rept. U. S. Geol.
 Surv. Terr., I, 1873, pp. 286, 345, pl. 16, figs. 18, 19.
4736. **Ornithomimus sedens** Marsh. Type.
 Sacrum, pelvis, and twelve anterior caudals. Laramie
 (Cretaceous). Alkali Creek, Wyoming.
 Marsh, Amer. Journ. Sci. (3), XLIII, 1892, p. 451.

4097. **Palæotheca polycypha** Cope. Cotypes.
Vertebral and marginal bones. Bridger (Eocene). Wyoming.
Cope, Pal. Bull. No. 1, 1872, p. 4; Proc. Amer. Phil. Soc., XII, 1872, p. 463.
= *Emys polycypha*.
2107. **Palæotheca terrestris** Cope. Type.
Vertebral, episternal, and costal bones. Bridger (Eocene). Wyoming.
Cope, Pal. Bull. No. 1, 1872, p. 5; Proc. Amer. Phil. Soc., XII, 1872, p. 464.
= *Emys terrestris*.
5373. **Phytosaurus rostratus** (Marsh). See *Rhytidodon rostratus*.
1000. **Piratosaurus plicatus** Leidy. Type.
Tooth. Cretaceous. Red River Settlement, 50 miles south of Selkirk Settlement, Manitoba.
Leidy, Smithsonian Contrib. to Knowl., XIV, No. 6, 1865, pp. 29, 30, pl. 19, fig. 8.
2198. **Placerias hesternus** Lucas. Type.
Right humerus. Triassic. Three miles north of Tanners Crossing, Little Colorado River, Arizona.
Lucas, Proc. U. S. Nat. Mus., XXVII, 1904, p. 194, pl. 4.
5380. **Placosauridæ**, gen. and sp. undet.
Fragment of skeleton including dermal and cranial plates, distal end of femur and shaft of humerus. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 32, figs. 26-36.
1132. **Plastomenus communis** Cope. Type.
Series of costal bones. Wasatch (Eocene). New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 35; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 50, pl. 25, figs. 1-1b.
1140. **Plastomenus communis** Cope. Paratype.
Part of carapace. Wasatch (Eocene). New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 35; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 50, pl. 25, fig. 5.
1138. **Plastomenus multifoveatus** Cope. Plesiotype.
Costal bone. Wasatch (Eocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 49, pl. 25, fig. 11.
= *Plastomenus thomasi* (fide O. P. Hay).
1138. **Plastomenus thomasi** (Cope). See *Plastomenus multifoveatus*.

4094. **Plastomenus trionchooides** (Cope). Type.
Cope, Sixth Ann. Rept. U. S. Geol. Surv. Terr. for 1872, 1873, p. 619; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 123, pl. 18, fig. 1.
See *Anosteira trionchooides*.
4971. **Pleurocœlus altus** Marsh. Type.
Tibia, proximal and distal ends of fibula. Potomac (Jurassic). Prince George County, Maryland.
Marsh, Amer. Journ. Sci. (3), XXXV, 1888, p. 92.
= *Astrodon altus*.
4968. **Pleurocœlus nanus** Marsh. Cotypes.
4969. Dorsal, sacral, and caudal vertebræ. Potomac (Jurassic).
4970. Prince George County, Maryland.
Marsh, Amer. Journ. Sci. (3), XXXV, 1888, p. 90, text figs. 1-6; Sixteenth Ann. Rept. U. S. Geol. Surv., 1896, pl. 40, figs. 4-9.
= *Astrodon nanus*.
2267. **Pleurocœlus nanus** Marsh. Plesiotypes.
5372. (1) Metacarpal, metatarsal, and unguinal phalanx; (2) distal caudal vertebra. Potomac (Jurassic). Prince George County, Maryland.
Marsh, Sixteenth Ann. Rept. U. S. Geol. Surv. for 1894-5, 1896, (1) pl. 41, figs. 1-7; (2) pl. 40, figs. 10, 11.
= *Astrodon nanus*.
218. **Poicilopleuron valens** Leidy. Type.
Half of vertebral centrum. Cretaceous? Middle Park, Colorado.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 3 (as *Poicilopleuron (Antrodemus) valens*); Rept. U. S. Geol. Surv. Terr., I, 1873, p. 267, pl. 15, figs. 16-18 (on plate as *Antrodemus*).
= *Antrodemus valens*.
2135. **Priconodon crassus** Marsh. Type.
Tooth. Potomac (Jurassic). Muirkirk, Prince George County, Maryland.
Marsh, Amer. Journ. Sci. (3), XXXV, 1888, p. 93, text figs. 7-9; Sixteenth Ann. Rept. U. S. Geol. Surv. 1896, p. 187, pl. 44, figs. 2a-c.
4126. **Protagrass lacustris** Cope. Type.
Vertebræ. Bridger (Eocene). Cottonwood Creek, Wyoming.
Cope, Pal. Bull. No. 3, 1872, p. 3; Proc. Amer. Phil. Soc., XII, 1872, p. 471; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 103, pl. 23, figs. 17, 18.
4047. **Pterosphenus schucherti** Lucas. Type.
Vertebræ. Jacksonian (Eocene). Cocoa, Alabama.
Lucas, Proc. U. S. Nat. Mus., XXI, 1898, p. 637, pls. 45, 46.
5373. **Rhytidodon rostratus** Marsh. Type.
Posterior portion of skull. Triassic. North Carolina.
Marsh, Amer. Journ. Sci. (4), II, 1896, p. 61, text fig. 2.
= *Phytosaurus rostratus*.

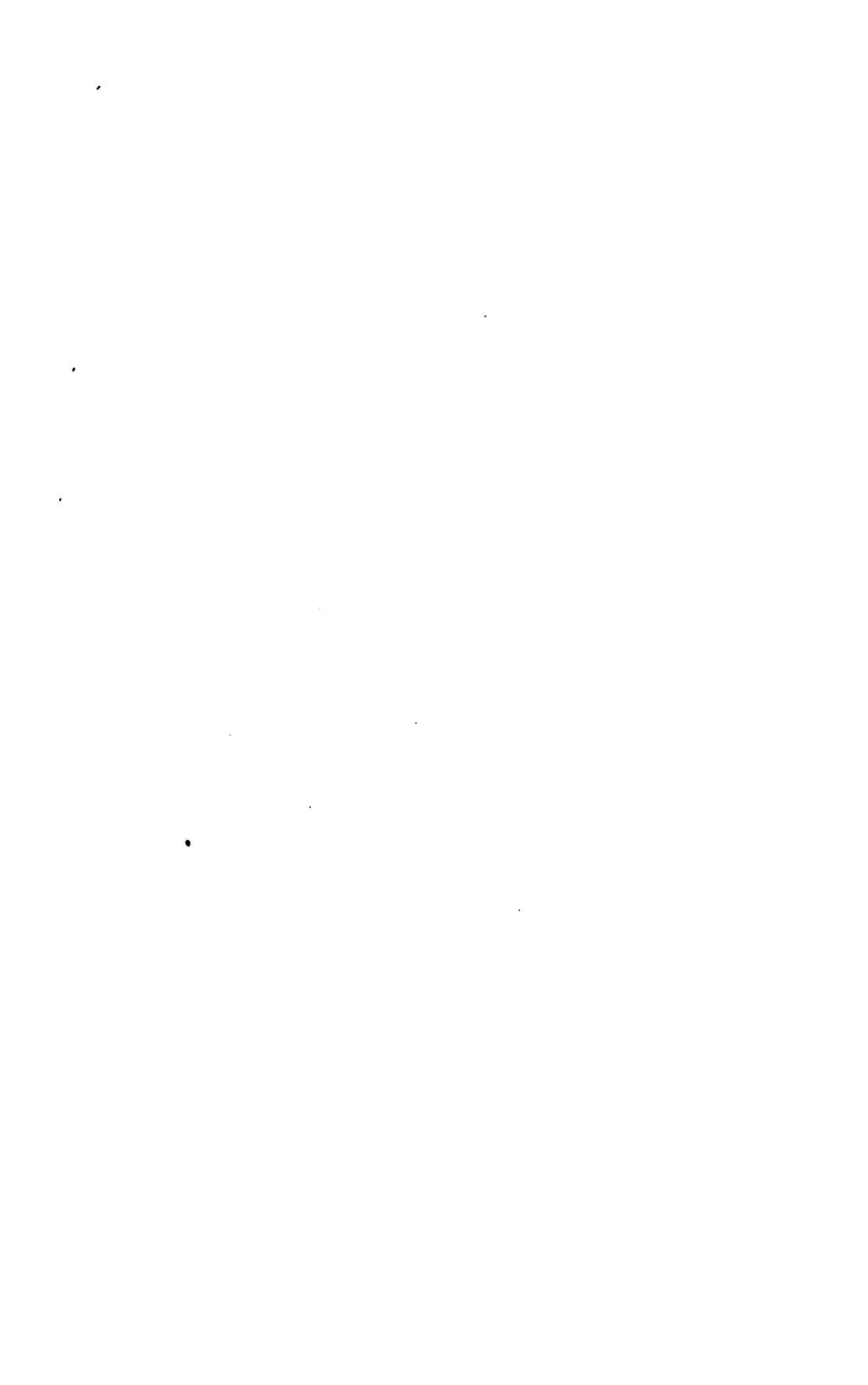
2185. **Saniwa ensidens** Leidy. Type.
Dorsal vertebræ and other portions of skeleton. Bridger
(Eocene). Near Granger, Wyoming.
Leidy, Proc. Acad. Nat. Sci. Phila., 1870, p. 124; Rept. U. S. Geol.
Surv. Terr., I, 1873, pp. 181, 344, pl. 15, fig. 15.
4471. **Sauropleuræ latithorax** Cope. Type.
Cranium and anterior part of body on slab. Coal Measures.
Linton, Jefferson County, Ohio.
Cope, Proc. Amer. Philos. Soc., XXXVI, 1897, p. 86, pl. 3, fig. 4.
4752. **Stegosaurus marshi** Lucas. Type.
Vertebræ, leg bones, sacrum, spines, and plates. Lower
Cretaceous? South Dakota.
Lucas, Proc. U. S. Nat. Mus., XXIII, 1901, p. 591, pls. 23, 24.
4934. **Stegosaurus stenops** Marsh. Type.
Skull and partial skeleton, including vertebral column and
dermal plates. Morrison (Jurassic). Canyon City,
Colorado.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 415, pl. 6; Geol. Mag.,
London, Dec. 3, V, 1888, pl. 1; Sixteenth Ann. Rept. U. S.
Geol. Surv. for 1894-5, Pt. 1, 1896, p. 186, pl. 43, figs. 1-3; Mon.
U. S. Geol. Surv., XXVII, 1897, p. 499, text fig. 52.
4937. **Stegosaurus sulcatus** Marsh. Type.
Caudal spine. Morrison (Jurassic). Quarry 13, Canyon
City, Colorado.
Marsh, Amer. Journ. Sci. (3), XXXIV, 1887, p. 415, pl. 8, figs. 4-6;
Sixteenth Ann. Rept. U. S. Geol. Surv., 1896, p. 193, pl. 50,
figs. 4-6.
97. **Stylemys nebrascensis** Leidy. Type.
Part of the carapace and plastron. White River (Oligocene).
Bad Lands, White River, South Dakota.
Leidy, Proc. Acad. Nat. Sci. Phila., 1851, p. 172.
See *Testudo nebrascensis*.
94. **Stylemys nebrascensis** Leidy. See *Testudo nebrascensis*.
98. **Stylemys nebrascensis** Leidy. See *Emys hemispherica* and
Testudo hemispherica.
93. **Stylemys niobrarenensis** (Leidy). See *Testudo niobrarenensis*.
(Also catalogue numbers 954, 956, 959, 980.)
983. **Testudo crassiscutata** Leidy. Type.
Anterior and posterior parts of the plastron, tibia, and femur.
Pliocene. Peace Creek, Florida.
Leidy, Trans. Wagner Free Inst. Sci. Phila., II, 1889, p. 31, pl. 6,
figs. 4-7.
98. **Testudo hemispherica** (Leidy). Type.
Carapace and plastron. White River (Oligocene). Bad
Lands, White River, South Dakota.
Leidy, Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p.
570, pl. 12B, figs. 1, 2.
=*Stylemys nebrascensis*.
See *Emys hemispherica*.

2127. **Testudo klettiana** Cope. Type.
Caudal marginal bone. Loup Fork (Miocene). New Mexico.
Cope, Ann. Rept. Chief of Engineers, U. S. A., II, 1875, p. 995; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 285, pl. 67, fig. 3.
5367. **Testudo klettiana** Cope. Plesiotypes.
(1) Vertebral, (2) pygal, and (3) costal bones representing three individuals. "Loup Fork" (Miocene). New Mexico.
Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, pl. 67, (1) fig. 4; (2) fig. 5; (3) fig. 6.
97. **Testudo nebrascensis** (Leidy). Type.
Leidy, Owen's Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 567, pl. 12A, figs. 1, 2.
=Stylemys nebrascensis.
94. **Testudo nebrascensis** (Leidy). Plesiotype.
Carapace and plastron. White River (Oligocene). Bad Lands, White River, South Dakota.
Leidy, Smithsonian Contrib. to Knowl., VI, Art. VII, 1854, p. 104, pl. 19, fig. 3.
=Stylemys nebrascensis.
93. **Testudo niobrarenensis** Leidy. Plesiotypes.
954. (1) Posterior portion of carapace; (2) distal end of left femur; (3) anterior part of carapace; (4) distal portion of right humerus; (5) last vertebral and pygal plates.
959. Loup Fork (Upper Miocene). Niobrara River, Nebraska.
980. Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 225 (as *Stylemys niobrarenensis*), p. 340, (1) pl. 3, fig. 6; (2) pl. 19, fig. 6; (3) pl. 3, fig. 4; (4) pl. 19, fig. 8; (5) pl. 3, fig. 5.
=Stylemys niobrarenensis.
2126. **Testudo undata** Cope. Type.
Marginal bones, acetabulum, and portion of pelvis. Loup Fork (Miocene). New Mexico.
Cope, Ann. Rept. Chief of Engin., U. S. A., II, 1875, p. 994; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 283, pl. 67, figs. 1, 2.
219. **Thespesius occidentalis** Leidy. Cotypes.
to Proximal median phalanx, anterior and posterior caudal.
221. Laramie (Cretaceous). Grand River, South Dakota.
Leidy, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 311; Trans. Amer. Phil. Soc., XI, 1860, p. 151, pl. 10, figs. 1-7.
2414. **Thespesius occidentalis** Leidy. See *Claosaurus annectens*
3418. and *Trachodon annectens*.
5370.
903. **Toxochelys latiremisis** Cope. See *Cynocercus incisus*?

2414. **Trachodon annectens** (Marsh). Type.
Lucas, Smithsonian Misc. Coll. (Quart. issue) XLV 1903, pp. 317-330, pl. 72.
= *Thespesius occidentalis*.
See *Claosaurus annectens*.
5370. **Trachodon annectens** (Marsh). Plesiotype.
Lucas, Smithsonian Misc. Coll. (Quart. issue), XLV, 1903, p. 319, text fig. 41.
= *Thespesius occidentalis*.
See *Claosaurus annectens*.
4928. **Triceratops calicornis** Marsh. Type.
Greater part of skull, prementary, portion of atlas, presacral vertebræ, part of sacrum, pubes, pieces of ribs, and ossified tendons. Laramie (Cretaceous). Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (4), VI, 1898, p. 92.
1201. **Triceratops elatus** Marsh. Type.
Skull, lacking part of right side. Laramie (Cretaceous). Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLII, 1891, p. 265.
2410. **Triceratops galeus** Marsh. Type.
Horn core, vertebræ, and fragment of skull. Laramie (Cretaceous). Five miles from Brighton, Colorado.
Marsh, Amer. Journ. Sci. (3), XXXVIII, 1889, p. 174
4720. **Triceratops obtusus** Marsh. Type.
Jaws, nasal horn core, vertebræ, and fragment of skull. Laramie (Cretaceous). Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (4), VI, 1898, p. 92.
4800. **Triceratops prorsus** Marsh. Plesiotypes.
4842. Right coracoid and scapula, atlas, axis, cervicals, dorsals, sacrum, caudals, femora, tibiæ, humerus, ulnæ, ribs, pubes, and ilium. Laramie (Cretaceous). Converse County, Wyoming.
Marsh, Amer. Journ. Sci. (3), XLI, 1891, pp. 177, 178, pl. 3, figs. 3-6; pl. 4; pl. 5, figs. 1-6; pl. 6, figs. 1-3; pl. 7, figs. 2-4; pl. 8, figs. 1-3; Sixteenth Ann. Rept. U. S. Geol. Surv., 1896, p. 218, pls. 64, 65, 66, figs. 1-3; pl. 67, figs. 2-4; pl. 68.
2575. **Trionyx cariosus** Cope. Cotypes.
5456. (1) Fragmentary carapace and plastron bones; (2) distal portion of costal bone. Wasatch (Eocene). Gallinas River, New Mexico.
Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 35; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 44, pl. 26, (1) figs. 5-9; (2) fig. 10.
4122. **Trionyx concentricus** Cope. Type.
Portions of carapace. Bridger (Eocene). Cottonwood Creek, Wyoming.
Cope, Pal. Bull. No. 1, 1872, p. 2; Proc. Amer. Phil. Soc., XII, 1872, p. 461; Rept. U. S. Geol. Surv. Terr., III, 1884, p. 118, 120, pl. 16, figs. 3-6.

990. **Trionyx foveatus** Leidy. Cotype.
 Costal plate. Laramie (Cretaceous). Long Lake, Nebraska.
 Leidy, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 73; Trans. Amer. Phil. Soc., XI, 1860, p. 148, pl. 11, fig. 3.
96. **Trionyx guttatus** Leidy. Type.
 Part of carapace. Bridger (Eocene). Church Buttes, Uinta County, Wyoming,
 Leidy, Proc. Acad. Nat. Sci. Phila., 1869, p. 66; Rept. U. S. Geol. Surv. Terr., I, 1873, p. 176, pl. 9, fig. 1
1113. **Trionyx leptomitus** Cope. Type.
 Part of carapace. Wasatch (Eocene). New Mexico.
 Cope, Rept. to Engin. Dept. U. S. A., 1875, p. 35; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 44, pl. 26, figs. 1-3.
1110. **Trionyx leptomitus** Cope. Paratypes.
 5366. (1) Parts of carapace; (2) right hyposternal. Wasatch (Eocene). New Mexico.
 Cope, Rept. to Engin. Dept. U. S. A., 1875, p. 35; Rept. U. S. Geogr. Surv. W. 100th Merid. IV, Pt. II, 1877, p. 44, (1) pl. 25, figs. 27-31; (2) pl. 26, fig. 4
2581. **Trionyx radulus** Cope. Type.
 Portions of costal and dorsal plates. Wasatch (Eocene). Gallinas River, New Mexico.
 Cope, Syst. Cat. Vert. Eocene New Mexico, 1875, p. 35; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 45, pl. 26, figs. 11-16.
2358. **Trionyx vagans** Cope. Type.
 Costal bones. Laramie (Cretaceous). Colorado.
 Cope, Ann. Rept. Geol. and Geogr. Surv. Terr. for 1873, 1874, p. 453.
1112. **Trionyx ventricosus** Cope. Cotypes.
 5460. (1) Parts of carapace; (2) left hyposternal. Wasatch (Eocene.) New Mexico.
 Cope, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. II, 1877, p. 45, pl. 64, figs. 7, 11-12.
977. **Trionyx** sp. undet.
 Costal plate. Eocene. Little Sandy Creek, Wyoming.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, pl. 16, fig. 12.
41. **Tylosaurus dyspelor** (Cope). Type.
 Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 271, pl. 35, figs. 1-11; pl. 36, fig. 16.
 See *Liodon dyspelor*.
43. **Tylosaurus proriger** (Cope). Plesiotypes.
 3885. (1) Caudal vertebra; (2) tooth; (3) fragments of jaw and splenial bone; (4) extremity of snout. Niobrara (Cretaceous). Smoky Hill River, Kansas.
 3891.
 3894. Leidy, Rept. U. S. Geol. Surv. Terr., I, 1873, p. 274, (1) pl. 36, figs. 1, 2; (2) fig. 3; (3) pl. 35, fig. 13; (4) pl. 35, fig. 12.

2585. **Tybothorax coccinarum** Cope. Type.
Part of right maxillary, fragment of vertebra, and parts of
two dermal scuta. Triassic. Gallinas Creek, New
Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 265; Rept. U. S. Geogr.
Surv. W. 100th Merid., IV, Pt. II, 1877, p. 30, pl. 22, figs. 1-5.
2586. **Tybothorax coccinarum** Cope. Paratype.
Broken tooth, dermal plates, and coprolites. Triassic. Gal-
linas Creek, New Mexico.
Cope, Proc. Acad. Nat. Sci. Phila., 1875, p. 265; Rept. U. S. Geogr.
Surv. W. 100th Merid., IV, Pt. II, 1877, p. 30, pl. 22, figs. 6-9.



SECTION III.

CATALOGUE OF THE TYPES AND ILLUSTRATED SPECIMENS OF
FOSSIL PLANTS IN THE DEPARTMENT OF GEOLOGY,
UNITED STATES NATIONAL MUSEUM.



INTRODUCTION.

The following catalogue is an alphabetical enumeration of the paleobotanical specimens in the collections of the U. S. National Museum, which have been used as bases for new genera and species of fossil plants, or for purposes of illustration. It gives the names, authorities, and catalogue numbers of the specimens, together with the localities and geological horizons whence they came, with the proper citations of the publications wherein they were described and figured. Where a species has been subsequently transferred to another genus or species a cross reference is given to the earlier name.

In a few cases some of the types and illustrations are composite. It has, therefore, been impossible always to distinguish the specimens of a single type, or the specimens that have been used for illustration. In all such cases the numbers of every specimen used by the author in the description of the type (so far as could be determined) are given.

The material for the catalogue has been compiled by Dr. A. C. Peale, with the cooperation of Mr. David White and Dr. F. H. Knowlton, and the manuscript prepared by Mrs. M. S. F. Jouy and the Misses L. M. Graves and M. W. Moodey.

CATALOGUE OF THE TYPES AND ILLUSTRATED
SPECIMENS OF FOSSIL PLANTS IN THE
DEPARTMENT OF GEOLOGY, UNITED
STATES NATIONAL MUSEUM.

3249. **Abietites angusticarpus** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 263, pl. 133, fig. 1.
7374. **Abietites angusticarpus** Fontaine. Illustrated specimen.
Lakota (Low. Cret.). Cliff on east bank Oak Creek, two
miles below Robbins's Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 671, pl. 163, fig. 14.
8245. **Abietites carolinensis** Fontaine. Type.
Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 309, pl. 47, fig. 1.
See *Pachypteris* sp. and *Palissya carolinensis*.
6933. **Abietites cretacea** Newberry. Type.
Dakota (Cret.). Whetstone Creek, Colfax County, New
Mexico.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 18, pl. 14, fig. 5.
64. **Abietites dubius** Lesquereux. Types.
66. Laramie (Cret.). Spring Canyon, near Fort Ellis, Montana.
67. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 81,
pl. 7, figs. 19, 22-24.
65. **Abietites dubius** Lesquereux. Types.
68. Laramie (Cret.). Spring Canyon, near Fort Ellis, Mon-
tana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 81,
pl. 7, figs. 20, 21.
= *Sequoia reichenbachi*.
598. **Abietites carnestinæ** Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 49,
pl. 1, fig. 7.
See *Pterophyllum haydenii* (part).

3272. *Abietites ellipticus* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 263, pl. 132, figs. 8, 9; pl. 133, figs. 2-4; pl. 168, fig. 8.
3743. *Abietites linkii* (Roemer) Dunker. Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 268, pl. 37, fig. 2.
3284. *Abietites macrocarpus* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 262, pl. 132, fig. 7.
63. *Abietites setiger* Lesquereux. (Rootlets.) Illustrated specimen.
Livingstone (Cret.). Six miles above Spring Canyon, near Fort Ellis, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 82, pl. 7, fig. 18.
4413. *Acacia lamarensis* Knowlton. Type.
Miocene (Tert.). East bank Lamar River between Cache and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 730, pl. 98, fig. 6.
4483. *Acacia macrosperma* Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, Bed No. 7, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 729, pl. 98, fig. 8.
2412. *Acacia oregoniana* Lesquereux. Type.
Miocene (Tert.). Van Horn's Ranch, John Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 14, pl. 5, fig. 4.
486. *Acacia septentrionalis* Lesquereux. Type.
Green River (Tert.). Near Costello's Ranch (Florissant) Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 418; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 299, pl. 59, fig. 9.
4412. *Acacia wardii* Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, Bed No. 4, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 730, pl. 98, fig. 7.
3321. *Acaciaphyllum longifolium* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal; banks of Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 279, 280, pl. 137, fig. 6; pl. 138, figs. 1-3.

3444. **Acaciæphyllum microphyllum** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 280, pl. 138, fig. 5.
3256. **Acaciæphyllum spatulatum** Fontaine. Type.
3903. Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal; banks of Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 280, pl. 138, figs.
4, 6-9.
3195. **Acaciæphyllum variabile** Fontaine. Type.
Potomac (Low. Cret.). Covington street, Baltimore.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 281, pl. 170, fig. 7.
383. **Acer æquidentatum** Lesquereux. Illustrated specimen.
Green River? (Tert.). Confluence of White and Green
rivers, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 262,
pl. 48, fig. 1.
2413. **Acer bendirei** Lesquereux. Type.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, pp. 14, 26, pl. 5, fig.
5; pl. 6, fig. 1; pl. 7, fig. 1; pl. 8, fig. 1.
7576. **Acer bendirei** Lesquereux. Illustrated specimen.
Miocene (Tert.). Left bank of Columbia River near the
mouth of Moffat's Creek, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 49, pl. 6, fig. 4.
2415. **Acer dimorphum** Lesquereux. Type.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 15, pl. 9, fig. 1.
8502. **Acer gigas** Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of Mt.
Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 76, pl. 14, fig. 1.
1582. **Acer indivisum** Lesquereux. Type.
Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, pp.
180, 181, pl. 36, figs. 6, 9.
= *Acer lesquereuxii*.
4159. **Acer indivisum** Weber. Illustrated specimen.
Laramie? (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 66, pl. 29, fig. 5.

1582. *Acer lesquereuxii* Knowlton. Type.
Green River (Tert.). Uinta County, formerly but wrongly
called Randolph County, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 26.
See *Acer indivisum* Lesquereux.
8498. *Acer medianum* Knowlton. Types.
8499. Mascall beds, Miocene (Tert.). Van Horn's Ranch, and
twelve miles west of Mt. Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 76, pl. 14, figs.
4, 5.
8500. *Acer minor* Knowlton. Types.
8501. Mascall beds, Miocene (Tert.). White Hill, east of Van
Horn's Ranch, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 76, pl. 14, figs.
2, 3.
2417. *Acer minor* Knowlton. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 76.
See *Acer* sp. (fruits of).
8494. *Acer oregonianum* Knowlton. Types.
to Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
8497. Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 75, pl. 13,
figs. 5-8.
33644. *Acer oregonianum* Knowlton. Types.
33645. Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
(2417) Day Valley, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 75.
See *Acer* sp. (fruits of).
30086. *Acer trilobatum* var. Knowlton. Illustrated specimen.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 155, pl. 29, fig. 2.
384. *Acer trilobatum productum*? (Al. Braun) Lesquereux. Illustrated specimens.
385. Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 261,
pl. 48, figs. 2, 3a.
5397. *Acer trilobatum productum* (Al. Braun) Heer. Illustrated specimen.
Eocene (Tert.). Herendeen Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 227, pl. 9, fig. 3.
8310. *Acer trilobatum productum*? (Al. Braun) Heer. Illustrated specimen.
Payette formation (Miocene). Two miles southeast of
Marsh post-office, Boise City, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 733, pl. 102, fig. 3.

4157. *Acer trilobatum tricuspidatum* (Al. Braun) Heer. Illustrated specimen.
Fort Union (Tert.). Little Missouri, Dakota.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 66, pl. 29, fig. 4.
4158. *Acer trilobatum tricuspidatum* (Al. Braun) Heer. Illustrated specimen.
Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 66, pl. 29, fig. 3.
4407. *Acer vivarium* Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, Bed No. 3, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 735, pl. 98, fig. 4.
7069. *Acer* sp.? Newberry. Upper Eocene (Tert.). Bridge Creek, Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 115, pl. 46, fig. 8.
1832. *Acer* sp. Lesquereux. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 181, pl. 36, fig. 7.
5124. *Acer* sp. Knowlton (fruits of.) Fort Union (Tert.). Crescent Hill, above Yancey's, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 736, pl. 98, fig. 5.
2417. *Acer* sp. Lesquereux (fruits of). Mascall beds, Miocene (Tert.). Van Horn's Ranch, John Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 15, pl. 6, figs. 2, 3; pl. 7, fig. 2.
= *Acer oregonianum* (part).
= *Acer minor* (part).
3453. *Aceriphyllum aralioides* Fontaine. Type.
Potomac (Low. Cret.), 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 321, pl. 163, fig. 8.
720. *Acerites menispermifolius* Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 101.
= *Menispermites menispermifolius*.
See *Menispermites acerifolia*.
50086. *Acerites multiformis* Lesquereux. Types.
to Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
50088. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 156, pl. 34, figs. 1-9.

129. **Acorus brachystachys** Heer. Illustrated specimens.
 130. Laramie? (Cret.). Carbon, Wyoming.
 131. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, pp. 105, 106, pl. 14, figs. 14, 15, 17.
30910. **Acrostichites [Acrostichides] densifolius** Fontaine. Type.
 Triassic. Clover Hill, Richmond Coal Field, Virginia.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 34.
8203. **Acrostichites egyptiacus** (Emmons) Fontaine. Type.
 Triassic. Egypt, Chatham County, North Carolina.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 99, pl. 48, fig. 8.
 See *Sphenopteris egyptiaca*.
3480. **Acrostichites [Acrostichides] linnææfolius** (Bunbury) Fon-
 30930. taine. Types.
 Triassic. Gowry shaft, Midlothian, Richmond Coal Field,
 Virginia.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 25, pl. 6, fig. 3; pl. 7, figs. 1-4; pl. 8, fig. 1; pl. 9, fig. 1.
3481. **Acrostichites [Acrostichides] microphyllus** Fontaine.
 30931. Types.
 to Triassic. Clover Hill, Richmond Coal Field, Virginia.
 30934. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 33, pl. 7, fig. 5; pl. 10, fig. 2; pl. 11, fig. 4; pl. 12, fig. 3.
8209. **Acrostichites oblongus** Emmons. Type.
 Triassic. Ellingtons, near Lockville, North Carolina.
 Emmons, Geol. Rept. Midland Counties of North Carolina, 1856,
 p. 326, pl. 4, figs. 6, 8; Amer. Geology, VI, 1857, p. 101, pl. 4,
 figs. 6, 8.
 = *Lonchopteris oblonga*.
30915. **Acrostichites [Acrostichides] rhombifolius** Fontaine.
 30916. Types.
 Triassic. Carbon Hill, Richmond Coal Field, Virginia.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 29.
 = *Acrostichites tenuifolius*.
8215. **Acrostichites rhombifolius** Fontaine. Illustrated specimen.
 Triassic. Haywood, Chatham County, North Carolina.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 105, pl. 49, fig. 7.
 = *Acrostichites tenuifolius*.
3482. **Acrostichites [Acrostichides] rhombifolius rarinervis**
 30935. Fontaine. Types.
 30936. Triassic. Clover Hill, Richmond Coal Field, Virginia.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 32, pl. 13, fig. 3.
8215. **Acrostichites tenuifolius** (Emmons) Fontaine. Type.
 Triassic. Haywood, Chatham County, North Carolina.
 Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 287, pl. 39, fig. 4.
 See *Odontopteris tennifolius*.

30915. **Acrostichites tenuifolius** (Emmons) Fontaine. Supplemental type.
 30916. Triassic. Carbon Hill, Richmond Coal Field, Virginia.
 Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 287.
 See *Acrostichites* [*Acrostichides*] *rhombofolius*.
3356. **Acrostichopteris densifolia** Fontaine. Type.
 3892. Belt and Covington streets, Baltimore, Maryland; fishing hut above Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 107, pl. 94, fig. 4; pl. 170, fig. 11; pl. 171, figs. 2, 6; pl. 172, fig. 13.
3293. **Acrostichopteris longipennis** Fontaine. Type.
 Potomac (Low. Cret.). Belt and Covington streets, Baltimore, Maryland.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 107, pl. 170, fig. 10; pl. 171, figs. 1, 5, 7.
3957. **Acrostichopteris parcelobata** Fontaine. Type.
 Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal; roadside near Potomac Run, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 108, pl. 94, figs. 6, 7, 11, 14.
3893. **Acrostichopteris parvifolia** Fontaine. Type.
 3294. Potomac (Low. Cret.). Belt and Covington streets, Baltimore; fishing hut above Dutch Gap Canal; entrance to Trent's Reach, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 108, pl. 94, figs. 5, 9, 10, 12; pl. 171, figs. 3, 4; pl. 172, fig. 14.
- 7013 **Acrostichum hesperium** Newberry. Types.
 10 Green River (Tert.). Green River, Sweetwater County,
 7016. Wyoming.
 Newberry, Proc. U. S. Nat. Mus., V., 1883, p. 503; Mon. XXXV, U. S. Geol. Surv., 1898, p. 6, pl. 61, figs. 2-5.
7609. **Acrostichum simulatum** Knowlton. Type.
 Miocene (Tert.). Coal Creek, Lane County, Oregon.
 Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900, p. 37, pl. 1, fig. 1.
8246. **Actinopteris quadrifolia** (Emmons) Fontaine. Illustrated specimen.
 Triassic. Haywood, Chatham County, North Carolina.
 Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 310, pl. 47, fig. 2.
 See *Actinopteris quadrifoliata*.
8246. **Actinopteris quadrifoliata** Fontaine. Type.
 Triassic. Haywood, Chatham County, North Carolina.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 121, pl. 52, fig. 3.
 = *Actinopteris quadrifolia*.

1615. **Adiantites gracillimus** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 137, pl. 21,
fig. 8.
30087. **Æsculus arctica** Knowlton. Type.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 155, pl. 30.
8519. **Æsculus simulata** Knowlton. Types.
8520. Mascall beds, Miocene (Tert.). Twelve miles west of Mt.
Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv. 1902, p. 78, pl. 15,
figs. 1, 2.
1586. **Ailanthus longe-petiolata** Lesquereux. Types.
1587. Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 197, pl.
40, figs. 6, 7.
8228. **Albertia latifolia** Emmons. Type.
Triassic. Lockville, Chatham County, North Carolina.
Emmons, Am. Geology, VI, 1857, p. 126, fig. 95.
= *Otozamites carolinensis*.
13066. **Alethopteris ambigua** Lesquereux. Types.
13067. Cherokee, Des Moines (Penn.). Clinton, Henry County,
30855. Missouri, and Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 6, pl. 31, figs. 1, 1a, 2, 3; Text, I, 1880, p. 182.
3590. **Alethopteris ambigua** Lesquereux. Illustrated specimen.
5634. Lower Coal Measures (Penn.). Pitcher's and Owen's Coal
Mines, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 113, pl. 37, figs.
3, 4; pl. 41, fig. 9.
12244. **Alethopteris crassa** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 748, pl. 98, figs. 5, 5a.
11886. **Alethopteris evansii** Lesquereux. Types.
to Walden (Penn.). Tracy City and Rockwood, Tennessee.
11890. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 834.
11964. **Alethopteris gibsoni** Lesquereux. Type.
Pennsylvanian. Danville, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 6, pl. 28, fig. 4; Text, I, 1880, p. 183.
12092. **Alethopteris helenæ** Lesquereux. Type.
Pottsville (Penn.). Helena, Alabama.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P
Text, I, 1880, p. 179.

12542. *Alethopteris lanceolata* Lesquereux. Type.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Rept. Geol. Surv. Illinois, IV, 1870, p. 398, pl. 13, fig. 1.
= *Pecopteris lanceolata*.
2217. *Alethopteris lonchitica angustifolia* Lesquereux. Type.
Pottsville (Penn.). Warrior Creek, Jefferson County,
Alabama.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 27.
- 12174 *Alethopteris robusta* Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
12177. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 835.
11942. *Alethopteris rugosa* Lesquereux. See *Callipteridium rugosum*.
3594. *Alethopteris serlii* (Brongniart) Goeppert.
Illustrated specimen.
Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 117, pl. 37, fig. 1.
- 12098 *Alethopteris serlii* (Brongniart) Goeppert.
to Illustrated specimens.
12100. Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 6, pl. 29, figs. 2, 2a, 3, 4; Text, I, 1880, p. 176.
- 3591b. *Alethopteris serlii missouriensis* David White. Type.
3594a. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 118, pl. 37, fig. 2;
pl. 42, fig. 5.
- 409 *Aleurites eocenica* Lesquereux. Types.
to Laramie (Cret.). Black Buttes, Wyoming.
411. Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
327a. p. 397.
765. = *Grewiopsis eocenica*.
See *Grewiopsis saportanea*.
167. *Alnites inæquilateralis* Lesquereux. Types.
550. Green River (Tert.). Alkali Station, Wyoming.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., 1875 [1876],
p. 381; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 381; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 141, pl. 62, fig. 13.
= *Alnus inæquilateralis*.
- 645a. *Alnites quadrangularis* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, 1874, p. 62, pl. 4, fig. 1.
= *Hamamelites quadrangularis*.
See *Populites quadrangularis*.

7124. ***Alnus alaskana*** Newberry. Type.
Eocene (Tert.). Kootznahoo Archipelago, Alaska.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 509; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 65, pl. 48, fig. 8.
159. ***Alnus americana*** Ettingshausen. Type.
Laramie (Cret.). Evanston, Wyoming.
Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad.
der Wissensch., LXVII, 1833, p. 15; Mem. Geol. Surv. N. S.
W., Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 25.
= *Betula stevensoni*.
See *Betula goepperti* and *B. caudata*.
167. ***Alnus inaequalateralis*** (Lesquereux). Types.
550. Green River (Tert.). Alkali Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 151.
See *Alnites inaequalateralis*.
645. ***Alnus kansaseanus*** Lesquereux. Type.
Dakota (Cret.). Western Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, 1874, p. 62, pl. 30, fig. 8.
= *Quercus kanseana*.
See *Hamamelites kansaseanus*.
- 166a. ***Alnus kefersteinii*** (Göppert) Unger. Illustrated specimen.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 140,
pl. 18, fig. 7.
166. ***Alnus kefersteinii*** (Göppert) Unger. Illustrated specimen.
Green River (Tert.). Near Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 140,
pl. 64, fig. 11.
8551. ***Alnus macrodonta*** Knowlton. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 42, pl. 4, fig. 1.
7003. ***Alnus serrata*** Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County, Mon-
tana.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 55; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, fig. 11;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 66, pl. 33, fig. 11.
7091. ***Alnus serrulata fossilis*** Newberry. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 66, pl. 46, fig. 6.
7092. ***Alnus* sp.?** Newberry (fruit of).
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 67, pl. 46, fig. 7.

30084. **Alnus** sp. Knowlton.
 30093. Eocene (Tert.). Kukak Bay, Alaska.
 Knowlton, Harriman Alaska Exped., IV, 1904, p. 155, pl. 28, fig. 2;
 pl. 33, fig. 4.
5614. **Aloiopteris crosa** (Gutbier) David White. Illustrated specimen.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 70, pl. 23, fig. 6.
12386. **Aloiopteris crosa** (Gutbier) David White. Illustrated specimen.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 70, pl. 24, fig. 3A.
- 6465 **Aloiopteris winslovii** David White. Types.
 to McAlester (Penn.). One-half mile west of McAlester,
 6470. Indian Territory.
 White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
 p. 487; Mon. XXXVII, U. S. Geol. Surv., 1899, p. 72.
 = *Aloiopteris* (*Corynepteris*?) *winslovii*.
5610. **Aloiopteris** (*Corynepteris*?) *winslovii* David White. Illustrated specimens.
 5611. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 5612. Henry County, Missouri.
 5721. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 72, pl. 22, fig. 2;
 pl. 23, figs. 1-3.
5689. **Aloiopteris** (*Corynepteris*?) *winslovii* David White. Illustrated specimens.
 5690. Cherokee, Des Moines (Penn.). Hobb's Coal Mine, Henry
 County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 72, pl. 23,
 figs. 4, 5.
5609. **Aloiopteris** (*Corynepteris*?) *winslovii* David White. Illustrated specimens.
 5613. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
 County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 72, pl. 22, figs.
 1, 3.
 See *Pecopteris* sp.
576. **Amelanchier similis** Newberry. Type.
 Fort Union (Tert.). Yellowstone River, Montana.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 48; U. S. Geol.
 Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 25, fig. 6;
 Mon. XXXV, U. S. Geol. Surv., 1898, p. 111, pl. 40, fig. 60.
1908. **Amelanchier typica** Lesquereux. Type.
 Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 198, pl. 40,
 fig. 11.

633. *Ampelophyllum ovatum* Lesquereux. Types.
633b. Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1874 (1876), p. 355.
See *Celtis* ? *ovata* and *Populites ovata*.
361. *Ampelopsis tertiaria* Lesquereux. Type.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Suppl. Ann. Rept. U. S. Geol. and Geogr. Surv. Terr.,
1871 (1872), p. 7; Ann. Rept. U. S. Geol. and Geogr. Surv.
Terr., 1874, p. 242, pl. 43, fig. 1.
668. *Andromeda affinis* Lesquereux. Type.
Laramie (Cret.). Spring (Rocky) Canyon near Fort Ellis,
Montana.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 348, pl. 3, fig. 5; Rept. U. S. Geol. Surv. Terr., VIII,
Pt. III, 1883, p. 60, pl. 2, fig. 5.
2422. *Andromeda* ? (*Leucothoe*) *crassa* Lesquereux. Type.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 16.
8511. *Andromeda crassa* Lesquereux. Type.
(2422) Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 83, pl. 16, fig. 3.
1580. *Andromeda delicatula* Lesquereux. Types.
1581. Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 175, pl. 34,
figs. 10, 11.
335. *Andromeda grayana* Heer. Illustrated specimen.
Livingstone (Cret.). Six miles above Spring Canyon,
near Fort Ellis, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 234,
pl. 40, fig. 4.
2352. *Andromeda linearifolia* Lesquereux. Type.
Denver (Cret.). Ryolite beds, Silver Cliff, Colorado.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 42, pl. 3, figs. 2, 3.
638. *Andromeda parlatorii* Heer. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, pl. 28,
fig. 15.
50113. *Andromeda parlatorii longifolia* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 116, pl. 64,
fig. 19.
50114. *Andromeda wardiana* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 119, pl. 64,
fig. 17.

30837. **Aneimites (Wardia) fertilis** David White. Types.
to Lower Pottsville (Penn.). Near Nuttall, West Virginia.
30847. White, Smithsonian Misc. Coll., Quart., XLVII, 1904 [1905], p. 323,
pls. 47, 48.
6953. **Anemia perplexa** Hollick. Illustrated specimens.
to Laramie (Cret.). Point of Rocks, Sweetwater County,
6956. Wyoming.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 3, pl. 63,
figs. 1-4.
29. **Anemia perplexa** Hollick. See *Gymnogramma haydenii*.
3332. **Angiopteridium auriculatum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; roadside near
Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 113-114, pl. 7,
figs. 8-11; pl. 28, fig. 1.
4001. **Angiopteridium canmorense** Dawson. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County, Cali-
fornia.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 239,
pl. 66, fig. 4.
See *Angiopteridium nervosum*?
3335. **Angiopteridium densinerve** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 115, pl. 29, fig. 4.
3331. **Angiopteridium dentatum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 117, pl. 30, figs. 6, 7.
3334. **Angiopteridium ellipticum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 114, pl. 29, fig. 3.
3419. **Angiopteridium nervosum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 114, pl. 29, fig. 2.
4001. **Angiopteridium nervosum?** Fontaine. Supplemental type.
Shasta (Low. Cret.). Near Lowrey, Tehama County, Cali-
fornia.
Fontaine, in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
= *Angiopteridium canmorense*.
3336. **Angiopteridium ovatum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 115-116, pl. 29,
figs. 6, 7.
3333. **Angiopteridium strictinerve** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 116, pl. 29, figs. 8, 9.

4000. **Angiopteridium strictinerve?** Fontaine. Supplemental type.
Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine, in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
= *Nageiopsis longifolia*.
3416. **Angiopteridium strictinerve latifolium** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 116, pl. 30, figs. 1, 5.
3963. **Angiosperm?** sp.? Fontaine (ament of).
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 272, pl. 135, fig. 16.
6905. **Anisophyllum semialatum** Lesquereux. Types.
6908. Dakota (Cret.). Near Beatrice, Gage County, Nebraska.
6909. Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 98,
pl. 6, figs. 2, 4, 5.
See *Quercus semialatus*.
17851. **Annularia cuspidata** Lesquereux. Type.
Pottsville (Penn.). Rushville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 725, pl. 92, figs. 7, 7a.
17841. **Annularia emersoni** Lesquereux. Type.
Monongahela (Penn.). St. Clairsville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 50; III, 1884, p. 725, pl. 92, figs. 6, 6a.
See *Annularia sphenophylloides minor*.
17862. **Annularia longifolia** Brongniart. Illustrated specimens.
17863. Allegheny (Penn.). Mazon Creek, Illinois.
17864. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 2, pl. 2, figs. 1, 2; Text, I, 1880, p. 45; III, 1884,
p. 706.
= *Annularia stellata*.
17860. **Annularia minuta** Brongniart? Illustrated specimen.
Dunkard (Permo-Carb.). Blacksville, Monongalia County,
West Virginia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 725, pl. 92, figs. 8, 8a.
17970. **Annularia sphenophylloides** (Zenker) Gutbier.
Illustrated specimen.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 2, pl. 11, fig. 8; Text, I, 1880, p. 48.
17950. **Annularia sphenophylloides intermedia** Lesquereux. Type.
Cherokee (Penn.). Lawrence, Kansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 724.

17841. **Annularia sphenophylloides minor** Lesquereux. Type.
Monongahela (Penn.). St. Clairsville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 2, pl. 3, fig. 13.
= *Annularia emersoni*.
6516. (?) **Annularia stellata** (Schlotheim) Wood. Illustrated specimen.
McAlester (Penn.). One mile west of McAlester, Indian
Territory.
White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p.
515, pl. 68, fig. 10.
- 12386b. **Annularia stellata** (Schlotheim) Wood. Illustrated specimen.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 159, pl. 24, fig. 3b.
17862. **Annularia stellata** (Schlotheim) Wood.
17863. See *Annularia longifolia*, *Bruckmannia tuberculata* and
17864. *Asterophyllites* sp.
18324.
- 18147 **Annularia tuberculata** (Brongniart) Lesquereux. Illustrated specimens.
to
18149. Pottsville (Penn.). Brewery Railroad Cut, West Pittston,
Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P.
Text, III, 1884, p. 723, pl. 89, figs. 1, 2.
8204. **Anomozamites? egyptiacus** Fontaine. Type.
Triassic. Egypt, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 290, pl. 39, fig. 5.
3405. **Anomozamites virginicus** Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run: Tele-
graph Station (Fredericksburg area), Virginia
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 168, pl. 30, fig. 4;
pl. 31, fig. 3.
5385. **Antholithus gaudium-rosæ** Ward. Type.
Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 355, pl. 3,
fig. 7.
1566. **Antholithes improbus** Lesquereux. Type.
Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 204, pl. 40,
fig. 21.
50124. **Apeibopsis cyclophylla** Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 180, pl. 25, fig. 6.

- 373 **Apeibopsis discolor** Lesquereux. Illustrated specimens.
to Laramie (Cret.). Black Buttes, Wyoming.
376. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, 1878, p. 259, pl. 46, figs. 4-7.
- 19566 **Aphlebia acuminata** (Lesquereux) David White. Types.
to Le Roy (Penn.). Garnett, Kansas.
19568. White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 100.
5546. **Aphlebia germari** Zeiller. Illustrated specimen.
Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
County, Missouri.
- White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 106, pl. 46.
19599. **Aphlebia subgoldenbergii** David White. Type.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
- White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 110, pl. 47, fig. 7.
5727. **Aphlebia** sp. David White.
Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
County, Missouri.
- White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 112, pl. 45, fig. 1.
171. **Apocynophyllum lesquereuxii** Ettingshausen. Type.
Laramie? (Cret.). Raton Mountains, New Mexico.
- Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad.
der Wissensch., LXVII, 1883, p. 32; Mem. Geol. Surv. N. S. W.,
Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 51.
- See *Quercus neriifolia*.
172. **Apocynophyllum pealei** Ettingshausen. Type.
Green River (Tert.). Near Florissant, Colorado.
- Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad.
der Wissensch., LXVII, 1883, p. 32; Mem. Geol. Surv. N. S. W.,
Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 51.
- 1605 **Apocynophyllum scudderi** Lesquereux. Types.
to Green River (Tert.) Alkali Station, Wyoming.
1609. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 172, pl.
45a, figs. 1-5.
50126. **Apocynophyllum soridum** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
- Lesquereux, Mon. XVII, U. S. Geol. Surv. 1891, p. 109, pl. 64, fig. 11.
671. **Aralia concreta** Lesquereux. Types.
672. Dakota (Cret.). Clay Center, Kansas.
- Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
p. 394; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 349; figs. 3, 4; Rept. U. S. Geol. Surv. Terr., VIII,
Pt. III, 1883, p. 64, pl. 9, figs. 3, 4.
- See *Aralia semiorbiculata*.
- 4135 **Aralia digitata** Ward. Type.
to Fort Union (Tert.). Head of Clear Creek, twenty-four
miles above Glendive, Montana.
4138. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 62, pl. 27, figs. 3-5.

2424. *Aralia digitata* Ward. Illustrated specimen.
Eocene (Tert.). Cherry Creek, Wasco County, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 20, pl. 11, fig. 4.
3300. *Aralia dubia* Fontaine. Type.
Potomac (Low. Cret.). Deep Bottom, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 314, pl. 157, figs. 1, 7.
= *Aralia fontainei*.
3300. *Aralia fontainei* Knowlton. Type.
Potomac (Low. Cret.). Deep Bottom, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 37.
See *Aralia dubia*.
330. *Aralia* ? *gracilis* Lesquereux. Type.
Laramie (Cret.). Bridger's Pass, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, 1878, p. 236, pl. 39,
fig. 1.
See *Liquidambar gracilis*.
2741. *Aralia groenlandica* Heer. Illustrated specimens.
50087. Dakota (Cret.). Near Fort Harker, Kansas.
50088. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 134, pl. 54,
figs. 1-3.
2425. *Aralia lasseniana* Lesquereux. Type.
Eocene? Lassen County, California.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 28, pl. 14, fig. 5.
4139. *Aralia looziana* Saporta and Marion. Illustrated specimen.
Fort Union (Tert.). Clear Creek, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 61, pl. 27, fig. 2.
7019. *Aralia macrophylla* Newberry. Type.
Green River (Tert.). Green River, Sweetwater County,
Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 513; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 121, pl. 67, fig. 1.
50079. *Aralia masoni* Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 133, pl. 15, fig. 4.
332. *Aralia notata* Lesquereux. Types.
332a. Fort Union (Tert.). Elk Creek, near Yellowstone National
Park.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 237,
pl. 39, figs. 2, 4.
See *Platanus dubia*.
331. *Aralia notata* Lesquereux. Illustrated specimen.
Denver (Cret.). Mount Bross, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 237,
pl. 39, fig. 3.

4140. *Aralia notata* Lesquereux. Illustrated specimen.
Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 60, pl. 27, fig. 1.
4232. *Aralia notata* Lesquereux. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, one-half mile below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 745, pl. 100, fig. 1.
6911. *Aralia* (?) *quinquepartita* Lesquereux. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 123, pl. 9, fig. 1.
673. *Aralia saportanea* Lesquereux. Illustrated specimens.
to Dakota (Cret.). South of Fort Harker, Kansas.
676. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 61, pl. 8, figs. 1, 2.
671. *Aralia semiorbiculata* Lesquereux. Types.
672. Dakota (Cret.). Clay Center, Kansas.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876], p. 395.
= *Aralia concreta*.
4341. *Aralia serrulata* Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile below mouth of Elk Creek, top of bluff, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 747, pl. 101, fig. 3.
677. *Aralia towneri* Lesquereux. Type.
Dakota (Cret.). Clay Center, Kansas.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876], p. 394; Ann. Rept. U. S. Geol. Surv. Terr., 1874 [1876], p. 349, pl. 4, fig. 1; Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 62, pl. 6, fig. 4.
575. *Aralia triloba* Newberry. Types.
6975. Fort Union (Tert.). Fort Clark, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 58; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 25, fig. 4; Mon. XXXV, U. S. Geol. Surv., 1898, p. 123, pl. 40, figs. 4, 5.
670. *Aralia tripartita* Lesquereux. Type.
Dakota (Cret.). Clay County, Kansas.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874 [1876], p. 348, pl. 1, fig. 1.
= *Sterculia tripartita*.
See *Sterculia obtusiloba*.
3978. *Aralia wellingtoniana vaughnii* Knowlton. Type.
Woodbine, Dakota (Low. Cret.). Arthur's Bluff, Red River, Lamar County, Texas.
Knowlton in Hill, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. VII, 1901, p. 317.

5159. *Aralia whitneyi* Lesquereux. Illustrated specimen.
Fort Union (Tert.). Fossil Forest Ridge, Aralia bed No.
4, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 748, pl.
99, fig. 3.
4411. *Aralia wrightii* Knowlton. Type.
Miocene (Tert.). Fossil Forest, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 745, pl.
101, fig. 1.
3357. *Araliæphyllum aceroides* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 319, pl. 156, fig. 11;
pl. 162, fig. 2.
3382. *Araliæphyllum magnifolium* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 318, pl. 159, figs. 9, 10.
3361. *Araliæphyllum obtusilobum* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 317, pl. 163, figs. 1, 4;
pl. 164, fig. 3.
30862. *Araucarioxylon arizonicum* Knowlton. Type.
Jurassic. Near Fort Wingate, New Mexico.
Knowlton, Proc. U. S. Nat. Mus., XI, 1888, pp. 1-4.
8178. *Araucarioxylon hoppertonæ* Knowlton. Type.
Lakota (Low. Cret.). Two miles southwest of Minnekahta
Station, Fall River County, South Dakota.
Knowlton in Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt.
II, 1899, p. 644, pls. 158, 159.
30866. *Araucarioxylon ? obscurum* Knowlton. Type.
Jurassic. Freezeout Hills, Carbon County, Wyoming.
Knowlton in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1898-99, p. 418, pl. 178.
3654. *Araucarioxylon virginicum* Knowlton. Type.
Triassic. Taylorsville, Virginia.
Knowlton, Bull. No. 56, U. S. Geol. Surv., 1889, p. 50, pl. 7, figs.
2-5.
30863. *Araucarioxylon wallacei* Knowlton. Type.
Purbeck (Upp. Jurassic). Isle of Portland, England.
Knowlton in Ward, Sixteenth Ann. Rept. U. S. Geol. Surv., Pt. II,
1896, p. 495, pl. 102, figs. 2-4.
30864. *Araucarioxylon webbii* Knowlton. Type.
Wealden (Low. Cret.). Hanover Point, Isle of Wight,
England.
Knowlton in Ward, Sixteenth Ann. Rept. U. S. Geol. Surv., Pt I,
1896, p. 496, pl. 102, fig. 5.

30865. *Araucarioxylon woodworthi* Knowlton. Type.
Triassic. Chesterfield County, Virginia.
Knowlton, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 517, pl. 52, figs. 1-6.
3343. *Araucarites aquiensis* Fontaine. Type.
Potomac (Low. Cret.). Bank near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 264, pl. 133, figs.
8-12.
8248. *Araucarites carolinensis* Fontaine. Type.
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 119, pl. 49, fig. 8.
See *Lepacyclotes circularis*.
7381. *Araucarites cuneatus* Ward. Type.
Lakota (Low. Cret.). John Barr's tunnel north fork of
Hay Creek, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 670, pl. 163, fig. 10.
3439. *Araucarites virginicus* Fontaine. Type.
Potomac (Low. Cret.). Entrance to Trents Reach, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 263, pl. 134, fig. 7.
7337. *Araucarites wyomingensis* Fontaine. Types.
7338. Lakota (Low. Cret.). Lon Cottle's ranch, southwest of
7339. Barrett, Crook County, Wyoming.
7341. Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
7344. p. 669, pl. 163, figs. 1-9.
17008. *Archæopteris denticulata* Lesquereux. Type.
Pottsville (Penn.). Rushville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text III, 1884, p. 774.
16904. *Archæopteris hibernica* (Forbes) Lesquereux. Illustrated specimen.
Catskill (Dev.). Coxtton Narrows, above Pittston, Penn-
sylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text I, 1880, p. 305, pl. 50, fig. 5.
16962. *Archæopteris macilenta* Lesquereux. Types.
16965. Catskill (Dev.). Meshoppen, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text III, 1884, p. 775.
16943. *Archæopteris minor* Lesquereux. Types.
16951. Catskill (Dev.). Coxtton Narrows, above Pittston, Penn-
sylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text I, 1880, p. 302, pl. 50, figs. 3, 4.

16980. **Archæopteris sphenophyllifolia** Lesquereux. Types.
 16981. Catskill (Dev.). Meshoppen, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text III, 1884, p. 775.
2710. **Arismæa cretacea** Lesquereux. Type.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 38, pl. 46, fig. 1.
6993. **Aristolochia cordifolia** Newberry. Type.
 Fort Union (Tert.). Tongue River, Custer County, Montana.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 90, pl. 39.
 See *Catalpa crassifolia*.
6994. **Aristolochia cordifolia** Newberry. Types.
 6995. Fort Union (Tert.). Tongue River, Custer County, Montana.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 74; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 25, fig. 7; Mon. XXXV, U. S. Geol. Surv., 1898, p. 90, pl. 40, fig. 7; pl. 60, fig. 4.
669. **Aristolochia dentata** Heer (Lesquereux). Supplemental type.
 Dakota (Cret.). Tekamah, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 59.
 = *Aristolochites dentata*.
3366. **Aristolochiæphyllum crassinerve** Fontaine. Type.
 Potomac (Low. Cret.). Seventy-second milepost, near Brooke, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 322, pl. 160, figs. 3-6.
669. **Aristolochites dentata** Heer. Illustrated specimen.
 Dakota (Cret.). Tekamah, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, 1874, p. 87, pl. 30, fig. 6.
 See *Aristolochia dentata*.
30787. **Arthrodendron diffusum** Ulrich. Types.
 30788. Yakutat (Lias). Pogibshi Island, opposite Kadiak, Alaska.
 Ulrich, Harriman Alaska Exped., IV, 1904, p. 138, pl. 14, figs. 1-3.
19174. **Artisia (Cordaites) sp.** Lesquereux.
 Pennsylvanian. Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, pl. 81, fig. 2.
2759. **Artocarpidium cretaceum** Ettingshausen. Illustrated specimen.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 86, pl. 50, fig. 7.

407. **Artocarpidium olmidæfolium?** (Unger) Lesquereux. Supplemental type.
Denver (Cret.) Golden, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 400.
=Celastrinites artocarpidiodes.
4409. **Artocarpus? quercoides** Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 716, pl.
92, fig. 1.
95. **Arundo goepperti** Münster. Illustrated specimen.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 86.
pl. 8, fig. 3.
96. **Arundo reperta** Lesquereux. Type.
Green River (Tert.). Near Green River Station, Wy-
oming.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
p. 384; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 311; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 87, pl. 8, figs. 7, 8.
362. **Asimina eocenica** Lesquereux. Illustrated specimens.
363. Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 251,
pl. 43, figs. 7, 8.
7650. **Asimina eocenica?** Lesquereux. Illustrated specimen.
Montana (Cret.). North Fork of Dutton Creek, Albany
County, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 57, pl. 14, fig. 3.
- 721 **Aspidiophyllum trilobatum** Lesquereux. Types.
to Dakota (Cret.). Near Fort Harker, Kansas.
726. Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 361, pl. 2, figs. 1, 2; Rept. U. S. Geol. Surv. Terr.,
VIII, Pt. III, 1883, pl. 12, fig. 1; pl. 13, figs. 1-5.
3826. **Aspidium angustipinnatum** Fontaine. Types.
3269. Potomac (Low. Cret.). Entrance to Trent's Reach; fish-
ing hut above Dutch Gap Canal; Fredericksburg; hill-
side near Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 98, pl. 16, figs. 1, 3,
8; pl. 17, fig. 1; pl. 19, fig. 10.
=Dryopteris angustipinnata.
3152. **Aspidium angustipinnatum montanense** Fontaine. Type.
Kootanie (Cret.). Great Falls, Montana.
Fontaine, Proc. U. S. Nat. Mus., XV, 1892, p. 491, pl. 84, figs. 1, 1a.
=Dryopteris angustipinnata montanense.

3374. **Aspidium cystopteroides** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 99, pl. 16, fig. 2.
= *Dryopteris cystopteroides*.
3437. **Aspidium dentatum** Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run (Fredericksburg area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 102, pl. 25, figs. 6, 7, 14, 15.
= *Dryopteris dentata*.
3391. **Aspidium dunkeri** (Schimper) Fontaine. Illustrated specimens.
3324. Potomac (Low. Cret.). Near telegraph station, banks
3828. Dutch Gap Canal; Fredericksburg; entrance to Trent's Reach; fishing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 101, pl. 22, fig. 9; pl. 25, figs. 11, 12; pl. 26, figs. 2, 8, 9, 18; pl. 54, figs. 3, 9.
= *Cladophlebis dunkeri*.
3993. **Aspidium dunkeri** (Schimper) Fontaine? Supplemental type.
Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894, p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
= *Cladophlebis ungeri*.
3967. **Aspidium ellipticum** Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run; bank near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 95, pl. 13, figs. 9, 10.
= *Dryopteris elliptica*.
3913. **Aspidium fredericksburgense** Fontaine. Type.
3346. Potomac (Low. Cret.). Fredericksburg; and near telegraph station (Fredericksburg area), Virginia.
3325. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 94, pl. 11, figs. 1-6; pl. 12, figs. 1-6; pl. 16, fig. 9; pl. 19, figs. 6, 7.
= *Dryopteris fredericksburgense*.
26. **Aspidium goldianum** Lesquereux. Type.
Laramie (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 393.
= *Lastrea goldiana*.
3268. **Aspidium heterophyllum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 96, pl. 14, figs. 1-5; pl. 15, figs. 1-5.
= *Dryopteris heterophylla*.

3992. **Aspidium heterophyllum** Fontaine. Types.
 3997. Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894, p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Cladophlebis parva* (part).
 = *Gleichenia nordenskiöldi* (part).
6934. **Aspidium kennerlyi** Newberry. Types.
 Puget Sound (Cret.). Nanaimo, Vancouver Island, British Columbia.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 11, pl. 16, figs. 4, 5.
 = *Dryopteris kennerlyi*.
33641. **Aspidium lakesii** (Lesqx.) Knowlton. Illustrated specimens.
 33642. Livingston (Cret.). Bear Creek, west side of Madison
 33643. Range, Montana.
 Knowlton, Bull. No. 105, U. S. Geol. Surv., 1898, p. 45, pl. 6, figs. 1-3.
 = *Dryopteris arguta*.
3829. **Aspidium macrocarpum** Fontaine. Type.
 Potomac (Low. Cret.). Bank of Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 103, pl. 17, fig. 2.
 = *Dryopteris macrocarpa*.
3329. **Aspidium microcarpum** Fontaine. Type.
 Potomac (Low. Cret.). Hillside near Potomac Run, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 103, pl. 59, figs. 2, 12; pl. 60, figs. 6, 7.
 = *Dryopteris microcarpa*.
3147. **Aspidium monocarpum** Fontaine. Type.
 7429. Kootanie (Cret.). Great Falls, Montana.
 7432. Fontaine, Proc. U. S. Nat. Mus., XV, 1892, p. 490, pl. 83, figs. 4-6, 6a; pl. 84, figs. 3, 3a.
 = *Dryopteris monocarpa*.
3153. **Aspidium montanense** Fontaine. Type.
 Kootanie (Cret.). Great Falls, Montana.
 Fontaine, Proc. U. S. Nat. Mus., XV, 1892, p. 490, pl. 82, figs. 1-3; pl. 83, figs. 1, 1a, 2, 3, 3a.
 = *Dryopteris montanense*.
2434. **Aspidium oerstedii** Heer. Supplemental type.
 Jurassic? Cape Lisburne, Alaska.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 32.
 = *Cladophlebis huttoni* (part).
 = *Onychiopsis psilotoides* (part).
 = *Cladophlebis alata* (part).

3344. **Aspidium parvifolium** Fontaine. Types.
 3822. Potomac (Low. Cret.). Fredericksburg; banks of Dutch
 3823. Gap Canal; fishing hut above this canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 100, pl. 21, fig. 6;
 pl. 24, fig. 8; pl. 25, fig. 10; pl. 26, figs. 1, 14, 16, 17.
 = *Dryopteris parvifolia*.
3426. **Aspidium virginicum** Fontaine. Types.
 3827. Potomac (Low. Cret.). Roadside near Potomac Run; 72d
 milepost, near Brooke, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 97, pl. 15, fig. 7;
 pl. 21, fig. 14.
 = *Dryopteris virginica*.
5379. **Aspidium virginicum** Fontaine. Illustrated specimen.
 Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
 Vernon, Virginia.
 Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 358, pl. 2,
 fig. 4.
 = *Dryopteris virginica*.
3329. **Aspleniopteris adiantifolia** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 118, pl. 16, fig. 6.
3318. **Aspleniopteris pinnatifida** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 118, pl. 22, figs.
 1-3, 6, 7.
3994. **Aspleniopteris pinnatifida?** Fontaine. Supplemental type.
 Shasta (Low. Cret.). Near Lowrey, Tehama County, Cal-
 ifornia.
 Fontaine in Stanton and Diller, Bull. Geol. Soc. Amer., V, 1894, p.
 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Dicksonia pachyphylla*.
19. **Asplenium (Diplazium) crossii** Knowlton. Types.
 Denver (Cret.). Golden, Colorado.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 44.
 See *Diplazium muelleri?*
5995. **Asplenium dicksonianum** Heer. Illustrated specimen.
 Dakota (Low. Cret.). Falls of Minnekahta Creek, four
 miles below Hot Springs, South Dakota.
 Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 704,
 pl. 170, fig. 1.
6007. **Asplenium dicksonianum** Heer? Illustrated specimen.
 Lakota (Low. Cret.). Red Canyon west of Minnekahta,
 Fall River County, South Dakota.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 664, pl. 162, figs. 6-8.

2435. **Asplenium dicksonianum** Heer. Supplemental type.
Jurassic. Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 32.
= *Dicksonia saportana*.
5233. **Asplenium erosum?** (Lesquereux) Knowlton. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 668,
pl. 80, fig. 6.
2436. **Asplenium forsteri** Debey and Ettingshausen. Supplemental type.
Jurassic? Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 32.
= *Cladophlebis huttoni*.
5110. **Asplenium haguei** Knowlton. Type.
5111. Laramie (Cret.). North of Pinyon Peak, on Wolverine
Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 655,
pl. 77, figs. 1, 2.
4278. **Asplenium iddingsii** Knowlton. Types.
5071. Fort Union (Tert.). Bank of Yellowstone River, one-half
mile below mouth of Elk Creek, Yellowstone National
Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 79, fig. 2;
pl. 80, fig. 9.
5036. **Asplenium magnum** Knowlton. Types.
5070. Fort Union (Tert.). Yellowstone River, base of bluff, one-
5087. half mile below mouth of Elk Creek, Yellowstone Na-
5088. tional Park.
5096. Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 667,
pl. 79, figs. 5-8, 8a.
5067. **Asplenium remotidens** Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile be-
low mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 669,
pl. 80, fig. 7.
7653. **Asplenium tenellum** Knowlton. Type.
Montana (Cret.). North Fork Dutton Creek, Carbon
County, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 19, pl. 3,
figs. 1, 2.
2020. **Asplenium tenerum** Lesquereux. Types.
2021. Fort Union (Tert.). Bad Lands, Dakota, near Gilmore
Station, U. P. R. R.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 221,
pl. 46a, figs. 1, 1a.

7642. *Asplenium wyomingense* Knowlton. Type.
Montana (Cret.). North Fork Dutton Creek, Carbon
County, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 19, pl. 3, fig. 12.
7641. *Asplenium* sp. Knowlton.
Montana (Cret.). North Fork Dutton Creek, Albany
County, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 20, pl. 3, fig. 11.
8206. *Asterocarpus falcatus* (Emmons) Fontaine. Type?
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 282, pl. 38, fig. 5.
30905. *Asterocarpus falcatus* (Emmons) Fontaine. See *Asterocar-*
pus virginienensis.
3497. *Asterocarpus penticarpa* Fontaine. Types.
30975. Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 48, pl. 26, fig. 2.
30902. *Asterocarpus platyrachis* Fontaine. Type.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 46, pl. 25, fig. 3.
30905. *Asterocarpus virginienensis* Fontaine. Type.
Triassic. Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 41, pl. 24, fig. 1.
= *Asterocarpus falcatus*.
30907. *Asterocarpus virginienensis obtusilobus* Fontaine. Type.
Triassic. Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 45, pl. 24, fig. 4.
10254. *Asterophycus coxii* Lesquereux. Type.
Pennsylvanian. New Harmony, Indiana.
Lesquereux, Geol. Rept. Ind., 1875, p. 139, pl. 2, figs. 1, 2; Coal
Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, I, 1880,
p. 12, pl. B, figs. 5, 6.
10255. *Asterophycus simplex* Lesquereux. Types.
to Pennsylvania. Beaver, Pennsylvania.
10257. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 1, pl. 3, figs. 7, 8; Text, I, 1880, p. 13.
18117. *Asterophyllites arkansanus* David White.
18118. Illustrated specimens.
18119. Pottsville (Penn.). Dade County, Georgia.
White, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 897.
See *Asterophyllites gracilis*.
17651. *Asterophyllites equisetiformis* (Schlotheim) Brongniart.
Illustrated specimen.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text I, 1880, p. 35, pl. 2, fig. 3.

6085. **Asterophyllites equisetiformis** (Schlotheim) Brongniart. Illustrated specimen.
Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henrys County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 151, pl. 59, fig. 1c.
18291. **Asterophyllites fasciculatus** Lesquereux. Types.
18292. Cherokee, Des Moines (Penn.). Clinton, Henry County,
18297. Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 2, pl. 3, figs. 1, 2; Text, I, 1880, p. 40.
= *Sphenophyllum* (*Asterophyllites*) *fasciculatum*.
18117. **Asterophyllites gracilis** Lesquereux. Illustrated specimens.
18118. Pottsville (Penn.). Dade County, Georgia.
18119. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 714, pl. 93, figs. 3, 5, 7.
= *Asterophyllites arkansanus*.
18276. **Asterophyllites longifolius** Brongniart. Illustrated specimen.
Pottsville (Penn.). Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 716, pl. 91, fig. 2.
5673. **Asterophyllites longifolius** (Sternberg) Brongniart.
5676. Illustrated specimens.
5677. Cherokee, Des Moines (Penn.). Owen's and Pitcher's coal mines, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 153, pl. 49, figs. 2-4.
18365. **Asterophyllites ovalis** Lesquereux. Illustrated specimens.
18366. Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 2, pl. 3, figs. 6, 7; Text I, 1880, p. 36.
18324. **Asterophyllites** sp. Lesquereux (fructified).
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 2, pl. 3, fig. 12.
= *Annularia stellata*.
See *Bruckmannia tuberculata*.
3181. **Athrotaxopsis expansa** Fontaine. Type.
3783. Potomac (Low. Cret.). Hillside near Potomac Run;
3851. entrance to Trent's Reach; banks of Dutch Gap Canal;
3951. fishing hut above canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 241, 242; pl. 113, figs. 5, 6; pl. 115, fig. 2; pl. 116, fig. 5; pl. 117, fig. 6; pl. 135, figs. 15, 18, 22.
3324. **Athrotaxopsis grandis** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; 72d milepost near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889; pp. 240, 241, pl. 114, figs. 1-3; pl. 116, figs. 1-4; pl. 135, fig. 10.

3230. *Athrotaxopsis pachyphylla* Fontaine. Type.
 3852. Potomac (Low. Cret.). Banks of Dutch Gap Canal fishing hut above Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 242, pl. 115, figs. 1, 3; pl. 117, figs. 1, 3-5.
3185. *Athrotaxopsis tenuicaulis* Fontaine. Type.
 3853. Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal; Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 241, pl. 114, figs. 4, 5; pl. 115, fig. 4; pl. 116, fig. 6; pl. 117, fig. 2.
7401. *Athrotaxopsis tenuicaulis* Fontaine. Illustrated specimens.
 5967a. Lakota (Low. Cret.). East bank Oak Creek, two miles
 5967b. below Robbins's Ranch, Crook County, Wyoming.
 4968. Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 674, pl. 164, figs. 1-4.
8428. *Baiera gracilis* (Bean) Bunbury. Illustrated specimen.
 Jurassic? One hundred and eighty miles northeast of Cape Lisburne, Alaska.
 Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 168, pl. 44, fig. 2.
8254. *Baiera muensteriana* (Presl) Heer. See *Baiera* sp. Emmons.
30937. *Baiera multifida* Fontaine. Types.
 30938. Triassic. Clover Hill, Richmond Coal Field, Virginia.
 Fontaine, Mon. VI, U. S. Geol. Surv. 1883, p. 87, pl. 45, fig. 3; pl. 46, fig. 2.
8233. *Baiera multifida* Fontaine. Illustrated specimen.
 Triassic. Chatham County, North Carolina.
 Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 304, pl. 43, fig. 4.
8384. *Baiera palmata* Heer. Illustrated specimens.
 8387. Neocomian (Cret.) or Jurassic? Cape Lisburne, Alaska.
 (2437) Lesquereux, Proc. U. S. Nat. Mus., X, 1888, p. 31, pl. 16, figs. 4, 5.
 Fig. 4 = *Podozamites grandifolius*.
 Fig. 5 = *Ginkgodium* ? *alaskense*.
8363. *Baiera palmata* Heer. Supplemental type.
 (2437) Neocomian or Jurassic? Cape Lisburne, Alaska.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 31.
 = *Nageiopsis longifolia*.
8254. *Baiera* sp. Emmons.
 Triassic. Lockville, Chatham County, North Carolina.
 Emmons, Am. Geology, VI, 1857, p. 133, fig. 102.
 = *Baiera muensteriana*.
3205. *Baieropsis adiantifolia* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg; roadside near Potomac Run; near Telegraph Station, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 211, pl. 92, figs. 8, 9; pl. 93, figs. 1-3; pl. 94, figs. 2, 3.

7386. **Baieropsis adiantifolia** Fontaine. Illustrated specimen.
Lakota (Low. Cret.). Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 684, pl. 168, fig. 8.
3350. **Baieropsis adiantifolia minor** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 212, pl. 94, fig. 1.
3232. **Baieropsis denticulata** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 210, pl. 93, fig. 7.
3207. **Baieropsis expansa** Fontaine. Types.
3494. Potomac (Low. Cret.). Fredericksburg; bank of Dutch Gap
3895. Canal; fishing hut above canal; entrance to Trent's
3896. Reach, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 207, pl. 89, figs. 1, 3;
pl. 90, fig. 1; pl. 91, fig. 2; pl. 92, fig. 5.
3208. **Baieropsis foliosa** Fontaine. Type.
Potomac (Low. Cret.). Bank near Brooke, White House
Bluff, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 209, pl. 93, figs. 4-6.
3231. **Baieropsis longifolia** Fontaine. Type.
Potomac (Low. Cret.). Near Telegraph Station (Freder-
icksburg area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 210, pl. 91, fig. 6.
3209. **Baieropsis macrophylla** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 212, pl. 90, fig. 6.
3206. **Baieropsis pluripartita** Fontaine. Types.
3496. Potomac (Low. Cret.). Entrance of Trent's Reach; banks
3894. of Dutch Gap Canal; fishing hut above canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 208, pl. 79, fig. 4;
pl. 90, figs. 2-5; pl. 91, figs. 1, 3, 4, 7; pl. 92, figs. 1, 2, 6.
7388. **Baieropsis pluripartita** Fontaine? Illustrated specimens.
7389. Lakota (Low. Cret.). Cliff north side Pine Creek, two
miles west of Mrs. Dorsett's ranch, Crook County,
Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 685, pl. 168, figs. 9-12.
3351. **Baieropsis pluripartita minor** Fontaine. Types.
3497. Potomac (Low. Cret.). Entrance to Trent's Reach; banks
3897. of Dutch Gap Canal; fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 208, 209, pl. 91,
fig. 5; pl. 92, figs. 3, 4.

1781. **Banksites lineatus** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 165,
pl. 32, fig. 21.
7566. **Benzoin dilleri** Knowlton. Type.
Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 46, pl. 4, fig. 3.
2697. **Benzoin venustum** (Lesquereux) Knowlton. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 47.
7046. **Berberis simplex** Newberry. Type.
Upper Eocene (Tert.). Bridge Creek, Cook County,
Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 514; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 97, pl. 56, fig. 2.
5320. **Berchemia multinervis** (Al. Braun) Heer. Illustrated specimen.
Fort Union (Tert.). Bull Mountains, forty miles from Bil-
lings, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 73, pl. 33, fig. 1.
5321. **Berchemia multinervis** (Al. Braun) Heer. Illustrated specimen.
Denver (Cret.). South Table Mountain, near Golden,
Colorado.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 73, pl. 33, fig. 2.
= *Rhamnus goldianus*.
820. **Berchemia multinervis** (Al. Braun). Heer. Supplemental type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 277.
8300. **Betula æqualis?** Lesquereux. Illustrated specimen.
Payette formation (Miocene). Two miles southeast of
Marsh postoffice, Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 728, pl. 102, fig. 5.
7074. **Betula angustifolia** Newberry. Types.
7075. Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 508; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 63, pl. 46, fig. 5; pl. 47, fig. 5.
5367. **Betula basiserrata** Ward. Type.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 32, pl. 14, fig. 4.

643. *Betula beatriciana* Lesquereux. Types.
745. Dakota (Cret.). Near Beatrice, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 95; Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 61, pl. 5, fig. 5; pl. 30, fig. 4.
8485. *Betula bëndirei* Knowlton. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 40, pl. 4, fig. 2.
159. *Betula caudata* Goepfert. Types.
160. Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 293.
= *Betula stvensoni*.
See *Betula goepperti* and *Alnus americana*.
5366. *Betula coryloides* Ward. Type.
Fort Union (Tert.). Seven Mile Creek, below Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 31, pl. 14, fig. 3.
8535. *Betula? dayana* Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 41, pl. 4, fig. 4.
1670. *Betula florissanti* Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 150, pl. 27, fig. 11.
159. *Betula goepperti* Lesquereux. Types.
160. Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 138, pl. 17, figs. 22, 23.
= *Betula stvensoni*.
See *Betula caudata* (?) and *Alnus americana*.
158. *Betula gracilis?* Ludwig. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 138, pl. 17, fig. 20.
- 7058b. *Betula heterodonta* Newberry. Types.
7071 Upper Eocene (Tert.). Bridge Creek, Crook County,
to Oregon.
7073. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 508; Mon. XXXV, U. S. Geol. Surv., 1898, p. 64, pl. 44, figs. 1-3; pl. 45, fig. 6.
7047. *Betula heteromorpha* Knowlton. Types.
7052. Upper Eocene (Tert.). Bridge Creek, Crook County,
7060. Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 39.
See *Populus polymorpha*.

8481. **Betula heteromorpha** Knowlton. Types.
 8482. Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 698; Bull. No. 204, U. S. Geol. Surv., 1902, p. 39, pl. 3, figs. 6, 7.
4350. **Betula iddingsi** Knowlton. Types.
 4353. Fort Union (Tert.). Hill above Lost Creek, bed No. 2, and
 5086. Yellowstone River, one-half mile below the mouth of
 5164. Elk Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 698, pl. 86, figs. 4, 5.
8567. **Betula nigra** Linnæus. Types.
 8568. Interglacial (Pleistocene). Morgantown, West Virginia.
 8588. Knowlton in I. C. White, Amer. Geol., XVIII, 1896, p. 371.
 8589.
5365. **Betula prisca** Etttingshausen. Illustrated specimen.
 Fort Union (Tert.). Seven Mile Creek, below Glendive, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 31, pl. 14, fig. 2.
161. **Betula stevensoni** Lesquereux. Type.
 161a. Laramie? (Cret.). Evanston, Wyoming.
 162. Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872],
 162a. p. 293; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 139,
 pl. 18, figs. 1-5.
159. **Betula stevensoni** Lesquereux. See *Alnus americana*, *Betula*
 160. *goepperti*, and *B. caudata*.
1671. **Betula truncata** Lesquereux. Types.
 1742. Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 150, pl. 28, figs. 7, 8.
156. **Betula vogdesii** Lesquereux. Types.
 157. Laramie? (Cret.). Fort Fetterman, Wyoming.
 Lesquereux Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874 [1876], p. 312; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 137, pl. 17, figs. 18, 19.
30076. **Betula** sp. Knowlton.
 Eocene (Tert.). Kukak Bay, Alaska.
 Knowlton, Harriman Alaska Exped., IV, 1904, p. 153, pl. 24, fig. 2.
8299. **Betula** sp. Knowlton (fruit of).
 Payette (Miocene). Two miles southeast of Marsh post-office, Boise County, Idaho.
 Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898, p. 727, pl. 99, fig. 9.
2716. **Betulites populifolius** Lesquereux. Type.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 64, pl. 6, figs. 1, 2.

50125. **Betulites westii grewiopsideus** Lesquereux. Illustrated specimen.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 63, pl. 64, fig. 10.
3296. **Bombax virginiensis** Fontaine. Type.
Potomac (Low. Cret.). near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 310, pl. 151, fig. 4.
17581. **Bornia radiata** (Brongniart) Schimper. Illustrated specimens.
17582. Pennsylvanian. Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 706, pl. 91, fig. 5.
3314. **Brachyphyllum crassicaule** Fontaine. Type.
Potomac (Low. Cret.). Entrance to Trent's Reach 72d milepost, near Brooke, Virginia.
Fontaine Mon. XV, U. S. Geol. Surv., 1889, pp. 221, 222, pl. 100, fig. 4; pl. 109, figs. 1-7; pl. 110, figs. 1-3; pl. 111, figs. 6, 7; pl. 112, figs. 6-8; pl. 168, fig. 9.
7652. **Brachyphyllum macrocarpum** Newberry. Types.
7659. Montana (Cret.). North Fork of Dutton's Creek and west
7660. of Harper's Station, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 29, pl. 4, figs. 5, 6.
3320. **Brachyphyllum parceramosum** Fontaine. Types.
3342. Potomac (Low. Cret.). Near Telegraph Station, (Fred-
3950. ericksburg Area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 223, pl. 110, fig. 4.
3747. **Brachyphyllum texense** Fontaine. Type.
Trinity (Lower Cret.). Glenrose, Texas.
Fontaine, Proc. U. Nat. Mus., XVI, 1893, p. 269, pl. 38, figs. 3-5; pl. 39, figs. 1, 1a.
3900. **Brachyphyllum** sp.? Fontaine (cone).
Potomac (Low. Cret.). Entrance to Trent's Reach, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 224, 225, pl. 168, fig. 2.
3400. **Brachyphyllum** sp. Fontaine (cone).
Potomac (Low. Cret.). Entrance to Trent's Reach, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 223, 224, pl. 135, fig. 8.
7018. **Brasenia ? antiqua** Newberry. Type.
Green River (Tert.). Green River, Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 514; Mon. XXXV, U. S. Geol. Surv., 1898, p. 93, pl. 68, fig. 7.
15559. **Bothrodendron arborescens** (Lesquereux) David White.
See *Lycopodites arborescens*.

5693. **Brittsia problematica** David White. Types.
 5722. Cherokee, Des Moines (Penn.). Pitcher's and Hobb's coal
 5723. mines, Henry County, Missouri.
 5724. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 98, pl. 47, figs.
 5811. 1, 2, 3, 4, 5; pl. 48, figs. 1-3.
18324. **Bruckmannia tuberculata** Sternberg. Illustrated specimen.
 Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 3, fig. 12. (On page 2 is referred to as *Asterophyllites*.)
 = *Annularia stellata*.
 See *Asterophyllites* sp.
1797. **Bumelia florissanti** Lesquereux. Types.
 1798. Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 174, pl. 34,
 figs. 4, 5.
6983. **Cabomba ? gracilis** Newberry. Type.
 Fort Union (Tert.). Fort Union, Buford County, North
 Dakota.
 Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 514; Mon. XXXV,
 U. S. Geol. Surv., 1898, p. 91, pl. 22, fig. 1.
46. **Cabomba inermis** (Newberry) Hollick. Types.
 47. Fort Union (Tert.). Fort Union, North Dakota.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 92, pl. 22, fig. 2;
 pl. 23, fig. 3.
 See *Psilotum inerme*.
1920. **Cæsalpinia ? linearis** Lesquereux. Type.
 Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 300,
 pl. 59, fig. 7.
 = *Mimosites linearis*.
17521. **Calamites ramifer** Stur. Illustrated specimens.
 17522. Pottsville (Penn.). Campbell's Ledge, near Pittston, Penn-
 sylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text III, 1884, pp. 703-706, pl. 91, fig. 4, 4a.
17386. **Calamites ramosus** Artis. Illustrated specimens.
 to Missouriian (Penn.). Kansas.
 17389. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, pp. 702, 703, pl. 92, figs. 1-4.—White, Bull.
 No. 211, U. S. Geol. Surv., 1903, p. 101.
17307. **Calamodendron approximatum** Brongniart.
 Illustrated specimen.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 32, pl. 75, fig. 16.

17296. *Calamodendron cruciatum* Sternberg. Illustrated specimen.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 708, pl. 92, fig. 5.
18356. *Calamostachys brevifolia* Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 718, pl. 89, figs. 5, 5a.
18062. *Calamostachys lanceolata* Lesquereux. Type.
18063. Pottsville (Penn.). Male's coal bank, Washington County,
Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 715, pl. 91, fig. 1.
18054. *Calamostachys ovalis* Lesquereux. Type.
Pottsville (Penn.). Cole City, Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 717, pl. 89, fig. 3.
3664. *Calcisphæra lemoni* Knowlton. Type.
Corniferous (Low. Dev.). Falls of the Ohio, Indiana.
Knowlton, Amer. Journ. Sci., XXXVII, 1889, pp. 202-209, figs. 1-3.
1642. *Callicoma microphylla* Etttingshausen. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 246,
pl. 43, fig. 3.
= *Myrica drymeja*.
11238. *Callipteridium aldrichi* Lesquereux. Type.
12087. Pottsville (Penn.). Jefferson Mines, Alabama.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 7, pl. 39, figs. 1, 2; Text, I, 1880, p. 171.
= *Neuropteris aldrichi*.
11916. *Callipteridium inæquale* Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
11920. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 6, pl. 33, figs. 2, 2a, 3, 4, 5; Text, I, 1880, p. 168;
III, 1884, p. 745, pl. 98, fig. 1.
5603. *Callipteridium inæquale* Lesquereux. Illustrated specimens.
6093. Cherokee, Des Moines (Penn.). Gilkerson's Ford, Henry
6111. County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 123, pl. 39, fig. 4;
pl. 41, fig. 1d; pl. 42, fig. g.
11930. *Callipteridium mansfieldi* Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
11932. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 6, pl. 27, figs. 1, 2; Text, I, 1880, p. 166.

13181. **Callipteridium membranaceum** Lesquereux. Types.
 13182. Cherokee, Des Moines (Penn.). Clinton, Henry County,
 13183. Missouri.
 13187. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 27, figs. 4, 4a, 5, 5a, 6, 6a, Text, I, 1880, p. 172.—
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 120, pl. 38,
 figs. 4, 5 (refers specimens numbered 13181 and 13183 to
Pecopteris clintoni).
 = *Pecopteris clintoni* (part).
5625. **Callipteridium membranaceum** Lesquereux. Illustrated specimens.
 5691. Cherokee, Des Moines (Penn.). Deepwater, Pitcher's Coal
 5810. Mine, and Clinton, Henry County, Missouri.
 30858. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 120, pl. 38,
 figs. 1, 2, 3.
11878. **Callipteridium neuropteroides** Lesquereux. Types.
 11879. Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 6, pl. 27, figs. 3, 3a; Text, I, 1880, p. 166.
13601. **Callipteridium rigidum** Lesquereux. Types.
 13602. Anthracite series (Penn.). Olyphant, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 746, pl. 99, figs. 1, 2, 2a.
11942. **Callipteridium rugosum** Lesquereux. Type.
 Pottsville (Penn.). Near Pottsville, Pennsylvania.
 Lesquereux, Cat. Pottsville Association, 1858, p. 11, pl. 1, fig. 2;
 Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, I,
 1880, p. 169.
 = *Alethopteris rugosa*.
13605. **Callipteridium sinuatum?** (Brongniart) Lesquereux. Illustrated specimens.
 13606. Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 745, pl. 99, fig. 3.
3589. **Callipteridium sullivantii** (Lesquereux) Weiss. Illustrated specimens.
 5479. Cherokee, Des Moines (Penn.). Pitcher's and Owen's coal
 5481. mines, Henry County, Missouri.
 5482. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 123, pl. 39, figs.
 5660. 1-3; pl. 41, figs. 1-3.
 5674.
3971. **Callitris?** sp.? Fontaine (cone).
 Potomac (Low. Cret.). Fishing hut above Dutch Gap
 Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 272, pl. 169, fig. 8.
490. **Calycites hexaphylla** Lesquereux. Type.
 Laramie (Cret.). Evanston, Wyoming.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 402.
 = *Diospyros wodani*.

574. **Calycites polysepala** Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 31; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 25, fig. 3; Mon. XXXV, U. S. Geol. Surv., 1898, p. 139, pl. 40, fig. 3.
50019. **Calycites** sp. Lesquereux.
Dakota (Cret.). Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 221, pl. 22, fig. 8.
30789. **Cancellophycus rhombicum** Ulrich. Type.
Yakutat Series (Lias). Pogibshi Island, opposite Kadiak, Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 139, pl. 20, fig. 1.
- 25801 to 25803. **Cardiocarpon annulare** (Sternberg) Lesquereux. Illustrated specimens.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 814, pl. 110, figs. 28, 29, 30.
- 25441 to 25446. **Cardiocarpon annulatum** Newberry. Illustrated specimens.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 18, pl. 85, figs. 36, 37; Text, II, 1880, p. 564.
25807. **Cardiocarpon apiculatum** Goeppert and Berger. Supplemental type.
Pottsville (Penn.). Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 571.
6097. **Cardiocarpon (Samaropsis) branneri** Fairchild and David White. Illustrated specimen.
Cherokee, Des Moines (Penn.). Gilkerson's Ford, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 266, pl. 72, fig. 3; pl. 61, fig. 1e.
25379. **Cardiocarpon cinctum** Lesquereux. Type.
Anthracite series, Coal E (Penn.). Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 804, pl. 109.
25592. **Cardiocarpon circulare** Lesquereux. Type.
Allegheny (Penn.). Vermilion County, Indiana.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 812, pl. 110, fig. 10.
25565. **Cardiocarpon conglobatum** Lesquereux. Type.
Coal-bearing shales, Pottsville (Penn.). Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 810, pl. 109, fig. 11.

- 25598 **Cardiocarpon crassum** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
25602. ania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 812, pl. 109, fig. 12; pl. 110, figs. 6-9.
25384. **Cardiocarpon dilatum** Lesquereux. Type.
Coal-bearing shale, Pottsville (Penn.). Washington
County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 806, pl. 110, fig. 2.
26417. **Cardiocarpon diminutivum** Lesquereux. Type.
Pottsville (Penn.). Campbells Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, fig. 48; Text, III, 1884, p. 570.
25672. **Cardiocarpon diplotestum** Lesquereux. Type.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 812, pl. 110, fig. 13.
25511. **Cardiocarpon divergens** Lesquereux. Types.
25611. Anthracite Series, Coal F (Penn.). Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 811, pl. 110, fig. 4.
- 25786 **Cardiocarpon ellipticum** (Sternberg) Lesquereux.
to Illustrated specimens.
25789. Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Serv. Pa., Rept. Prog. P,
Text, III, 1884, p. 814, pl. 110, figs. 25, 26, 27.
25888. **Cardiocarpon ellipticum** (Sternberg) Lesquereux.
25890. Illustrated specimens.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 814, pl. 110, figs. 23, 24.
25714. **Cardiocarpon elongatum** Newberry. Illustrated specimen.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 809, pl. 109, fig. 16.
25775. **Cardiocarpon fasciculatum** Lesquereux. Type.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, figs. 30, 30a; Text, II, 1880, p. 570.
26158. **Cardiocarpon harveyi** Lesquereux. Types.
26159. Coal-bearing shale, Pottsville (Penn.). Privett's Bank,
Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 808, pl. 109, figs. 22, 23.

25417. **Cardiocarpon ingens** Lesquereux. Type.
Coal-bearing shale, Pottsville (Penn.). Washington County,
Arkansas.
Lesquereux, Second Geol. Rept. Ark., 1860, p. 311, pl. 4, fig. 4;
Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879,
p. 18, pl. 85, fig. 35; Text, II, 1880, p. 563.
26421. **Cardiocarpon kansasiense** (Lesquereux) David White. Type.
Pennsylvanian. Osage, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 108.
25684. **Cardiocarpon late-alatum** Lesquereux. Types.
25685. Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsyl-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, figs. 46, 47; Text, II, 1880, p. 568.
25585. **Cardiocarpon latior** Lesquereux. Types.
25586. Pottsville (Penn.). Rockwood, Tennessee.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
III, 1884, p. 811, pl. 110, figs. 5, 11, 12.
26165. **Cardiocarpon longicolle** Lesquereux. Types.
26166. Pottsville (Penn.). Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
III, 1884, p. 808, pl. 109, figs. 24, 25.
25516. **Cardiocarpon ovale** Lesquereux. Types.
25517. Coal-bearing shale, Pottsville (Penn.). Washington
County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa.; Rept. Prog. P, Text,
III, 1884, p. 810, pl. 109, fig. 9.
25482. **Cardiocarpon pachytestum** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsyl-
25486. vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
I, 1880, p. 565; III, 1884, p. 809, pl. 109, figs. 13, 14, 15.
25504. **Cardiocarpon patens** Lesquereux. Type.
Coal-bearing shale, Pottsville (Penn.). Washington County,
Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
III, 1884, p. 807, pl. 110, fig. 3.
25862. **Cardiocarpon pusillum** Lesquereux. Types.
25923. Anthracite Series, Coal E and F (Penn.). Wilkesbarre,
25924. Pennsylvania.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
III, 1884, p. 815, pl. 110, figs. 31, 32, 33.
15630. **Cardiocarpon simplex** Lesquereux. Types.
15631. Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsyl-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, figs. 49, 50; Text, II, 1880, p. 569.

26205. **Cardiocarpon speciosum** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 807, pl. 110, fig. 1.
- 25678 **Cardiocarpon zonulatum** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsyl-
25680. vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, fig. 44, 45; Text, II, 1880, p. 568.
- Cardiocarpus.** See **Cardiocarpon.**
98. **Carex berthoudi** Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, 1878, p. 92, pl. 9,
fig. 4.
- 1672 **Carpinus fraterna** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
*674. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
152, pl. 27, figs. 12-14.
176. **Carpinus grandis** Unger. Illustrated specimens.
532. Green River (Tert.). Near Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 143,
pl. 19, fig. 9; pl. 64, fig. 9.
- 168 **Carpinus grandis** Unger. Illustrated specimens.
to Green River (Tert.). Elko Station, Nevada; Florissant, Col-
170. orado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 143,
pl. 64, figs. 8-10.
See **Quercus elkoana.**
508. **Carpites bursæformis** Lesquereux. Type.
Laramie? (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 306,
pl. 60, fig. 30.
511. **Carpites cocculoides?** Heer. Illustrated specimen.
Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 307,
pl. 60, fig. 33.
512. **Carpites cocculoides? major** Lesquereux. Type.
Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 307,
pl. 60, fig. 39.
495. **Carpites coffæformis** Lesquereux. Type.
502. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 303,
pl. 60, figs. 6, 7.
50016. **Carpites cordiformis** Lesquereux. Type.
Dakota (Cret.). Ottawa County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 220, pl. 22, fig. 9.

497. *Carpites costatus* Lesquereux. Type.
Denver (Cret.). South Table Mountain, near Golden,
Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 303,
pl. 60, fig. 5.
2442. *Carpites fragariæformis* Lesquereux. Type.
Miocene (Tert.). Cherry Creek, Wasco County, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 16.
500. *Carpites glumæformis* Lesquereux. Type.
501. Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 304,
pl. 60, figs. 14, 15.
516. *Carpites laurineus* Lesquereux. Type.
Laramie? (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 304,
pl. 60, fig. 20.
515. *Carpites ligatus* Lesquereux. Type.
Laramie (Cret.). Placer Mountain, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 307,
pl. 60, fig. 36.
493. *Carpites lineatus* (Newberry) Lesquereux. Illustrated specimen.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 302,
pl. 60, figs. 1-1d.
504. *Carpites mitratus* Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 304,
pl. 60, fig. 18.
498. *Carpites myricarum* Lesquereux. Types.
499. Laramie (Cret.). Black Buttes, Wyoming.
499a. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 303,
pl. 60, figs. 8-11.
= Ginkgo sp.
266. *Carpites oviformis* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 302,
pl. 30, fig. 6a.
509. *Carpites pealei* Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 306,
pl. 60, fig. 31.
4480. *Carpites pedunculatus* Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 755,
pl. 103, fig. 3.

503. **Carpites rostellatus** Lesquereux. Types.
 503a. Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 303,
 pl. 60, figs. 12, 13.
514. **Carpites spiralis** Lesquereux. Type.
 Laramie (Cret.). Placer Mountain, New Mexico.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 306,
 pl. 60, fig. 27.
 See *Carpolithes spiralis*.
496. **Carpites triangulosus** Lesquereux. Type.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 302,
 pl. 60, fig. 4.
505. **Carpites utahensis** Lesquereux. Type.
 Laramie? (Cret.). Evanston, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 305,
 pl. 60, fig. 22.
947. **Carpites verrucosus** Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 305,
 pl. 60, fig. 23.
- 494a. **Carpites viburni** Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 305,
 pl. 60, fig. 26.
756. **Carpites?** sp. Lesquereux.
 757. Dakota (Cret.). Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 221.
 See *Carpolithes?* sp.
491. **Carpolithes arachioides** Lesquereux. Types.
 492. Laramie? (Cret.). Evanston, Wyoming.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 403.
 = *Leguminosites?* *arachioides*.
26355. **Carpolithes butlerianus** Lesquereux. Type.
 Anthracite series, Coal E (Carb.). Butler Mine, Pittston,
 Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
 III, 1884, p. 824, pl. 111, fig. 19.
26371. **Carpolithes cerasiformis** Sternberg. Illustrated specimen.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
 III, 1884, p. 824, pl. 111, fig. 18.

525. **Carpolithes compositus** Lesquereux. Type.
Laramie? (Cret.). Placer Mountain, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr. for 1871, Suppl. 1872, p. 16.
= *Palmocarbon compositum*.
26483. **Carpolithes conicus** Lesquereux. Type.
Pennsylvanian. Shamokin, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 824, pl. 111, fig. 17.
- 25757 **Carpolithes granularis** Sternberg. Illustrated specimens.
to Upper Coal Measures (Penn.). Osage, Kansas.
25759. Anthracite series, Coal A (Penn.). Boston Mine, Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 825, pl. 111, figs. 20, 21.
3755. **Carpolithes harveyi** Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 278, pl. 43, fig. 3.
- 15964 **Carpolithes latior** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylvania.
15966. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 826, pl. 110, figs. 69, 70.
- 25851 **Carpolithes minimus** Sternberg. Illustrated specimens.
to Allegheny (Penn.). Cannelton, Pennsylvania (25851).
25853. Anthracite series, Coal E and F (Penn.). Stanton Mine, Wilkesbarre, Pennsylvania (25852 and 25853).
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 825, pl. 110.
- 25950 **Carpolithes perpusillus** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylvania.
25952. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 825, pl. 111, figs. 22, 23, 24.
6960. **Carpolithes spinosus** Newberry. Type.
6961. Laramie (Cret.). North Branch Purgatory River, Las Animas County, Colorado.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 514; Mon. XXXV, U. S. Geol. Surv., 1898, p. 138, pl. 68, figs. 2, 3.
514. **Carpolithes spiralis** Lesquereux. Type.
Laramie (Cret.). Placer Mountain, New Mexico.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., Suppl., 1871 [1872], p. 16.
= *Carpites spiralis*.
25810. **Carpolithes transectus** Lesquereux. Types.
25811. Coal-bearing shale, Pottsville (Penn.). Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 826, pl. 111, figs. 27, 27a, 27b.

756. *Carpolithes* ? sp. Lesquereux.
 757. Dakota (Cret.). Decatur, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 114,
 pl. 27, fig. 5; pl. 30, fig. 11.
 = *Carpites* sp.
3888. *Carpolithus agglomeratus* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 267, pl. 134, fig. 5.
7380. *Carpolithus barrensensis* Ward. Type.
 Lakota (Low. Cret.). John Barr's tunnel, one mile north
 of Forks of Hay Creek, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p.
 692, pl. 169, figs. 14, 15.
3359. *Carpolithus brookensis* Fontaine. Type.
 Potomac (Low. Cret.). Bank near Brooke; fishing hut
 above Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 268, pl. 135, figs.
 2, 4; pl. 136, fig. 6; pl. 167, fig. 6.
3408. *Carpolithus conjugatus* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 267, pl. 134, fig. 9.
3961. *Carpolithus curvatus* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 269, pl. 135, fig. 17.
3407. *Carpolithus fasciculatus* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 265, pl. 134, fig. 1.
7362. *Carpolithus fasciculatus* Fontaine. Illustrated specimen.
 Lakota (Low. Cret.). Cliff north side of valley of South
 Fork of Hay Creek, two and one-half miles west of
 Barrett, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p.
 691, pl. 169, figs. 11, 12.
7342. *Carpolithus fœnarius* Ward. Type.
 Lakota (Low. Cret.). Lon Cottle's ranch, one mile south-
 west of Barrett, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p.
 693, pl. 169, figs. 17, 18.
7364. *Carpolithus montium-nigrorum* Ward. Type.
 Lakota (Low. Cret.). Cliff on north side of valley of South
 Fork of Hay Creek, two and one-half miles west of
 Barrett, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p.
 692, pl. 169, fig. 13.
3754. *Carpolithus obovatus* Fontaine. Type.
 Trinity (Low. Cret.). Glenrose, Texas.
 Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 278, pl. 43, fig. 5.

3411. *Carpolithus ternatus* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 265, pl. 134, figs.
2-4, 6, 8.
3388. *Carpolithus virginienensis* Fontaine. Types.
3870. Potomac (Low. Cret.). Near telegraph station; fishing
hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 266, pl. 134, figs.
11-14; pl. 135, figs. 1, 5; pl. 168, fig. 7.
7390. *Carpolithus virginienensis* Fontaine. Illustrated specimen.
Lakota (Low. Cret.). Cliff north side Pine Creek, two miles
west of Mrs. Dorsett's ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 693, pl. 169, fig. 16.
567. *Carya antiquorum* Newberry. Types.
568. Fort Union (Tert.). Mouth of Yellowstone River, North
Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 72; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, pl. 23, fig. 2; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 35, pl. 31, figs. 1, 2.
= *Hicoria antiquorum*.
470. *Carya antiquorum* Newberry. Illustrated specimens.
to Laramie (Cret.). Evanston, Wyoming.
475. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 289,
pl. 57, figs. 1-5; pl. 58, fig. 2.
5358. *Carya antiquorum* Newberry. Illustrated specimen.
Denver? (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 34, pl. 15, fig. 2.
1870. *Carya bilinica* Unger. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 191,
pl. 39, fig. 1.
= *Hicoria juglandiformis*.
487. *Cassia concinna*? Heer. Illustrated specimen.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 299,
pl. 59, figs. 8, 8a.
8308. *Cassia obtusa* Knowlton. Type.
8309. Payette Formation (Miocene). Two miles southeast of
Marsh postoffice, Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 731, pl. 100, figs. 4, 5.

485. **Cassia podogonioides** Ettingshausen. Types.
 581. Laramie (Cret.). Black Buttes, Wyoming.
 Montana (Cret.). Point of Rocks, Wyoming.
 Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad. der Wissensch., LXVII, 1883, p. 143; Mem. Geol. Surv. N. S. W., Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 69.
 = *Podogonium americanum*.
7092. **Cassia** sp.? Newberry.
 Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 113, pl. 46, fig. 10.
7645. **Castalia? duttoniana** Knowlton. Types.
 7646. Montana (Cret.). North Fork of Dutton Creek, Albany County, Wyoming.
 Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 55, pl. 13, fig. 7.
194. **Castanea intermedia** Lesquereux. Type.
 Green River (Tert.). Middle Park (Florissant?), Colorado.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874 [1876], p. 313; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 164, pl. 21, fig. 7.
- 5080 **Castanea pulchella** Knowlton. Types.
 to Fort Union (Tert.). Fossil Forest Ridge, Bed No. 7, Yellowstone National Park.
 5085. Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 702, pl. 86, figs. 6-8.
8585. **Castanea pumila** Miller. Type.
 Interglacial (Pleistocene). Morgantown, West Virginia.
 Knowlton in I. C. White, Amer. Geol., XVIII, 1896, p. 371.
5383. **Casuarina covillei** Ward. Type.
 Potomac (Low. Cret.). Near mouth of Doag Creek, Mount Vernon, Virginia.
 Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 353, pl. 3, fig. 2.
566. **Catalpa crassifolia** Newberry. Type.
 Fort Union (Tert.). Amil Creek?, Upper Missouri River, Montana.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 56.
6993. **Catalpa crassifolia** Newberry. Type.
 Fort Union (Tert.). Tongue River, Custer County, Montana.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 56; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 22.
 = *Aristolochia cordifolia*.
7. **Caulerpites incrassatus** Lesquereux. Illustrated specimens.
 8. Laramie (Cret.). Raton Mountains, New Mexico.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 40, pl. 1, figs. 11, 12.

25134. **Caulerpites** sp. Lesquereux.
Pennsylvanian. Osage, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 88.
2321. **Caulinites beckeri** Lesquereux. Type.
Pleistocene (Tert.). Clear Lake, California.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 36, pl. 1, fig. 3; pl. 2,
figs. 2-4.
120. **Caulinites fecundus** Lesquereux. Types.
121. Laramie (Cret.). Marshall mine, near Erie, Colorado.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 384; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 101,
pl. 14, figs. 1-3.
= *Onoclea fecunda*.
123. **Caulinites sparganioides** Lesquereux. Types.
to Laramie (Cret.). Black Buttes, Wyoming.
125. Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 391; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 99,
pl. 14, figs. 4, 7, 8.
127. **Caulinites sparganioides** Lesquereux. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 99,
pl. 14, fig. 5.
17125. **Caulopteris giffordi** Lesquereux. Type.
Lower Coal Measures (Penn.). Alta, Peoria County, Illi-
nois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 60, figs. 1, 2; Text, I, 1880, p. 343.
17106. **Caulopteris laceoi** Lesquereux. Type.
Anthracite Series, Coal G (Penn.). Olyphant, Pennsyl-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 344.
17118. **Caulopteris mansfieldi** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 60, fig. 3; Text, I, 1880, p. 346.
431. **Ceanothus cinnamomoides** Lesquereux. Type.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872],
p. 289.
= *Zizyphus cinnamomoides*.
425. **Ceanothus fibrillosus** Lesquereux. Type.
to Denver (Cret.). Golden, Colorado.
430. Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 381.
= *Zizyphus fibrillosus*.

- 4160 **Cebatha haydeniana** (Ward) Knowlton. Types.
to Fort Union (Tert.). Burns's Ranch and Iron Bluff, Mon-
4164. tana.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 62.
See *Cocculus haydenianus*.
408. **Celastrinites ambiguus** (Lesquereux) Knowlton. Types.
774. Livingston (Cret.). Six miles above Spring Canyon, Gal-
latin County, Montana.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 62.
See *Myrica ambigua* and *Celastrinites lævigatus*.
407. **Celastrinites artocarpidioides** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 268,
pl. 35, fig. 3.
See *Artocarpidium olmidæfolium?*
408. **Celastrinites lævigatus** Lesquereux. Types.
774. Livingston (Cret.). Six miles above Spring Canyon,
Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 269,
pl. 17, figs. 16, 16a.
= *Celastrinites ambiguus*.
See *Myrica ambigua*.
3958. **Celastrophyllum arcinerve** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 304, pl. 146, fig. 3.
3240. **Celastrophyllum brookense** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 305, 306, pl. 158,
fig. 8; pl. 159, fig. 7.
5394. **Celastrophyllum hunteri** Ward. Type.
Potomac (Low. Cret.). White House Bluff, Mount
Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 358, pl. 4,
fig. 9.
3304. **Celastrophyllum latifolium** Fontaine. Type.
Potomac (Low. Cret.). Belt and Covington streets, Balti-
more, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 306, pl. 172, figs.
3, 6; pl. 173, fig. 13.
2811. **Celastrophyllum obliquum** Knowlton. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Knowlton in Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891,
p. 173, pl. 57, fig. 5.

3322. *Celastrophyllum obovatum* Fontaine. Type.
Potomac (Low. Cret.). Belt and Covington streets, Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 307, pl. 172, figs. 9, 10.
3459. *Celastrophyllum obtusidens* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 305, pl. 156, fig. 5.
5997. *Celastrophyllum pulchrum* Ward. Types.
Dakota (Low. Cret.). Evans's quarry on Minnekahta Creek, four miles below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 706, pl. 171, figs. 3, 4.
3249. *Celastrophyllum tenuinerve* Fontaine. Type.
Potomac (Low. Cret.). Covington street, Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 306, pl. 172, fig. 2.
5340. *Celastrus alnifolius* Ward. Type.
5344. Fort Union (Tert.). Burns's Ranch, below Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 80, pl. 35, figs. 1, 2.
8539. *Celastrus confluens* Knowlton. Types.
8540. Mascall beds, Miocene (Tert.). Twelve miles west of Mount
8541. Vernon, and Van Horn's Ranch, John Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 71, pl. 12, figs. 1-3.
4345. *Celastrus culveri* Knowlton. Types.
5140. Fort Union (Tert.) Yellowstone River, one-half mile below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 732, pl. 97, fig. 4.
5341. *Celastrus curvinervis* Ward. Types.
5342. Fort Union (Tert.). Burns's Ranch, below Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 82, pl. 36, figs. 3, 4.
8516. *Celastrus dignatus* Knowlton. Types.
to Mascall beds, Miocene (Tert.). Twelve miles west of
8518. Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 71, pl. 11, fig. 5.
4390. *Celastrus ellipticus* Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile below mouth of Elk Creek, base of bluff, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 734, pl. 97, fig. 3.

5337. *Celastrus ferrugineus* Ward. Types.
 5338. Fort Union (Tert.). Burns's Ranch, and Iron Bluff, near
 5339. Glendive, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 78, pl. 34, fig. 1, 3, 4.
1854. *Celastrus fraxinifolius* Lesquereux. Types.
 to Green River (Tert.). Florissant, Colorado.
 1856. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 184,
 * pl. 33, figs. 2-4.
5336. *Celastrus grewiopsis* Ward. Type.
 Fort Union (Tert.). Burns's Ranch, below Glendive, Mon-
 tana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 81, pl. 36, fig. 2.
4397. *Celastrus inæqualis* Knowlton. Type.
 Fort Union (Tert.). Yellowstone River, base of bluff, one-
 half mile below mouth of Elk Creek, Yellowstone Na-
 tional Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 733,
 pl. 98, fig. 3.
7632. *Celastrus lindgreni* Knowlton. Types.
 7633. Payette (Miocene). Idaho City, Idaho.
 Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
 p. 732, pl. 99, fig. 13; pl. 100, fig. 6.
5335. *Celastrus ovatus* Ward. Type.
 Fort Union (Tert.). Iron Bluff, above Glendive, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 81, pl. 36, fig. 1.
5331. *Celastrus pterospermoides* Ward. Types.
 to Fort Union (Tert.). Iron Bluff and Burns's Ranch, near
 5334. Glendive, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 80, pl. 35, figs. 3-6.
5345. *Celastrus taurinensis* Ward. Types.
 5346. Fort Union (Tert.). Burns's Ranch and Bull Mountains,
 Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 79, pl. 34, figs. 5, 6.
1578. *Celtis mccoshii* Lesquereux. Type.
 Green River (Tert.). Uinta County, Wyoming, northeast
 of Randolph, Utah.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
 163, pl. 38, fig. 7.
633. *Celtis ? ovata* Lesquereux. Types.
 633b. Dakota (Cret.). Decatur, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I 1874, p. 66,
 pl. 4, figs. 2, 3.
 = *Ampelophyllum ovatum*.
 See *Populites ovata*.

7005. *Celtis parvifolia* Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County, Montana.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 510; Mon. XXXV, U. S. Geol. Surv., 1898, p. 84, pl. 53, fig. 6.
3447. *Cephalotaxopsis brevifolia* Fontaine. Types.
3881 Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal;
to Fredericksburg; roadside near Potomac Run, Virginia.
3883. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 238, pl. 105, fig. 3;
pl. 106, fig. 5; pl. 107, fig. 5.
8234. *Cephalotaxopsis carolinensis* Fontaine. Type.
Triassic. Lockville?, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 304, pl. 43, fig. 5.
3289. *Cephalotaxopsis magnifolia* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal; Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 236, 237, pl. 104, figs. 4, 5; pl. 105, figs. 1, 2, 4; pl. 106, figs. 1, 3; pl. 107, figs. 1, 2, 4; pl. 108, figs. 1, 3, 4.
- 5957a. *Cephalotaxopsis magnifolia* Fontaine. Illustrated specimens.
5957b. Lakota (Low. Cret.). South Fork of Hay Creek near
5990. Barrett, and Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 686, pl. 162, fig. 1, b; pl. 169, figs. 3, 4.
3415. *Cephalotaxopsis microphylla* Fontaine. Types.
3884. Potomac (Low. Cret.). Fredericksburg; fishing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 238, pl. 108, fig. 5; pl. 109, fig. 9.
3446. *Cephalotaxopsis ramosa* Fontaine. Types.
3880. Potomac (Low. Cret.). Fredericksburg; roadside near
3968. Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 237, 238, pl. 104, figs. 2, 3; pl. 106, figs. 2, 4; pl. 107, fig. 3; pl. 108, fig. 2.
4010. *Cephalotaxopsis?* *rhytidodes* Ward. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 258, pl. 68, fig. 8.
See *Cephalotaxopsis* sp. ?
4010. *Cephalotaxopsis* sp. ? Fontaine.
Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894, p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
= *Cephalotaxopsis?* *rhytidodes*.

- 143 **Ceratopetalum americanum** Ettingshausen. Types.
to Tertiary. Florissant, Colorado.
146. Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad. der Wissensch., LXVII, 1883, p. 37; Mem. Geol. Surv. N. S. W., Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 58.
See *Myrica acuminata*.
7685. **Cercis ? nevadensis** Knowlton. Type.
Esmeralda (Neocene). 4.5 kilometers northeast of Emigrant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt., II, 1900 p. 217, pl. 30, fig. 23.
1918. **Cercis parvifolia** Lesquereux. Types.
1919. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 201, pl. 31, fig. 7.
3663. **Chara compressa** Knowlton. Type.
Eocene (Tert.). Wales, San Pete County, Utah.
Knowlton, Botanical Gazette, XIII, No. 6, 1888, pp. 156, 157, figs. 1, 2.
1611. **Chara ? glomerata** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 135, pl. 21, fig. 12.
8222. **Chara springeræ** Knowlton. Type.
Pleistocene. Arroyo Pecos, Las Vegas, New Mexico.
Knowlton, Torreya, II, 1902, p. 72 [fig. in text].
8323. **Chara stantoni** Knowlton. Type.
Colorado? (Cret.). West side of Smith's Fork of Bear River, twenty miles north of Cokeville, Wyoming.
Knowlton, Botanical Gazette, XVIII, 1893, p. 141, figs. 1-3.
8241. **Cheirolepis muensteri** (Schenk) Fontaine. Illustrated specimen.
Triassic. Lockville, Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 108, pl. 53, fig. 3.
= *Palissya brevifolia*.
See *Walchia brevifolia*.
30781. **Chondrites alpestris** Heer. Illustrated specimen.
Yakutat series (Lias). Pogibshi Island, opposite Kadiak, Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 136, pl. 18, fig. 4.
30779. **Chondrites divaricatus** Fischer-Ooster. Illustrated specimens.
30780. Yakutat series (Lias). Pogibshi Island, opposite Kadiak, Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 136, pl. 16, figs. 1, 2.
2448. **Chondrites filiciformis** Lesquereux. Type.
Neocomian (Cret.). Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 32, pl. 16, fig. 1.

6. **Chondrites subsimplex** Lesquereux. Illustrated specimen.
Laramie (Cret.) Raton Mountains, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr. VII, Pt. II, 1878, p. 41,
pl. I, fig. 13.
7673. **Chrysobalanus pollardiana** Knowlton. Type.
Esmeralda (Neocene). 4.5 kilometers northeast of Emi-
grant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 216, pl. 30, fig. 19.
7699. **Cinchonidium ? turneri** Knowlton. Types.
7700. Esmeralda (Neocene). 3.8 and 4.5 kilometers northeast of
Emigrant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv. Pt. II, 1900,
p. 218, pl. 30, figs. 9-11.
313. **Cinnamomum affine** Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 219,
pl. 37, fig. 7.
5353. **Cinnamomum affine** Lesquereux. Illustrated specimens.
5354. Laramie (Cret.). Black Buttes Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 50, pl. 24, figs. 3, 5.
= *Ficus trinervis*.
8490. **Cinnamomum bendirei** Knowlton. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, pp. 59, 60, pl. 10,
fig. 4.
7581. **Cinnamomum dilleri** Knowlton. Type.
Miocene (Tert.) Comstock, Douglas County, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 47, pl. 4, fig. 1.
2712. **Cinnamomum ellipsoideum** Saporta and Marion. Illustrated specimens.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 105, pl. 51,
figs. 8, 9.
316. **Cinnamomum ellipticum** Knowlton. Type.
Livingston (Cret.). Spring Canyon (Hodgson's Coal Mine),
twelve miles southeast of Bozeman, Montana.
Knowlton, Bull. No. 105, U. S. Geol. Surv., 1894, p. 54.
See *Cinnamomum polymorphum* and *C. rossmässleri*.
1061. **Cinnamomum heerii** Lesquereux. Type.
Cretaceous. Point Doughty, Orcas Island, Washington.
Lesquereux, Amer. Journ. Sci. (2), XXVII, 1859, p. 361.

6939. *Cinnamomum heerii* Lesquereux. Illustrated specimen.
Puget Sound (Cret.). Point Doughty, Orcas Island, Wash-
ington.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 100, pl. 17,
fig. 3.
315. *Cinnamomum lanceolatum* ? (Unger) Heer. Illustrated specimens.
790. Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 219,
pl. 36, fig. 12.
5350. *Cinnamomum lanceolatum* ? (Unger) Heer. Illustrated specimen.
Laramie? (Cret.). Hodges Pass, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 49, pl. 24, fig. 2.
= *Cinnamomum wardii*.
2695. *Cinnamomum marioni* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 106, pl. 51,
figs. 6, 7.
316. *Cinnamomum polymorphum* Al. Braun. Illustrated specimens.
Livingston (Cret.). Spring Canyon (Hodgson's Coal
Mine), twelve miles southeast of Bozeman, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 221,
pl. 37, fig. 10.
= *Cinnamomum ellipticum*.
See *Cinnamomum rossmässleri*.
316. *Cinnamomum rossmässleri* Heer. Livingston (Cret.). Spring Canyon (Hodgson's Coal
Mine), twelve miles southeast of Bozeman, Montana.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 379.
= *Cinnamomum ellipticum*.
See *Cinnamomum polymorphum*.
834. *Cinnamomum scheuchzeri* Heer. Illustrated specimens.
Laramie (Cret.). Bozeman Coal Field, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 220,
pl. 38, fig. 8; Mon. XVII, 1892, p. 104, pl. 11, fig. 4.
642. *Cinnamomum scheuchzeri* Heer. Illustrated specimen.
Dakota (Cret.). Western Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 83,
pl. 30, figs. 2, 3.
See *Daphnogene cretacea*.
4494. *Cinnamomum spectabile* Heer. Illustrated specimen.
Miocene (Tert). Tower Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 727,
pl. 94, fig. 6.

5350. **Cinnamomum wardii** Knowlton. Type.
Laramie (Cret.) Hodges Pass, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 69.
See *Cinnomomum lanceolatum*.
2750. **Cissites acerifolius** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 163, pl. 58,
fig. 1.
695. **Cissites acuminatus** Lesquereux. Illustrated specimens.
696. Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 67,
pl. 5, figs. 3, 4.
50008. **Cissites alatus** Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 160, pl. 23,
fig. 6.
50114. **Cissites brownii** Lesquereux. Illustrated specimen.
Dakota (Cret.). Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 162, pl. 18,
fig. 11.
50145. **Cissites dentato-lobatus** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 164, pl. 66, fig. 4.
- 687 **Cissites harkerianus** Lesquereux. Illustrated specimens.
to Dakota (Cret.). Fort Harker, Kansas.
689. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 67,
pl. 3, figs. 3, 4; pl. 11, fig. 3.
See *Sassafras harkerianum*,
50057. **Cissites ingens** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 159, pl. 19, fig. 2.
5994. **Cissites ingens** Lesquereux. Illustrated specimen.
Dakota (Cret.). Falls of Minnekahta Creek, four miles
below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 708,
pl. 172, fig. 1.
6003. **Cissites ingens** Lesquereux. Illustrated specimen.
Dakota (Cret.). Evans's quarry on Minnekahta Creek,
four miles below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 708,
pl. 172, fig. 2.
2737. **Cissites ingens parvifolia** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 160, pl. 57,
figs. 3, 4.

2400. **Cissites microphyllus** Lesquereux. Type.
Pleistocene? (Tert.). Clear Lake, California.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 44, pl. 3, fig. 11.
50006. **Cissites populoides** Lesquereux. Type.
50007. Dakota (Cret.). In Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 162, pl. 18,
figs. 12, 13.
- 690 **Cissites salisburiaefolius** Lesquereux. Type.
to Dakota (Cret.). Lancaster County, Nebraska.
692. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 66.
(Illustrated as *Sassafras obtusum* in Vol. VI, pl. 13,
figs. 2-4.)
See *Sassafras obtusum* and *Populites salisburiaefolius*.
5996. **Cissites salisburiaefolius** Lesquereux. Illustrated specimen.
Dakota (Cret.). Falls of Minnekahta Creek, four miles
below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 707,
pl. 171, fig. 5.
- 343 **Cissus arrotiaefolia** Lesquereux. Types.
to Green River (Tert.). Green River and Medicine Bow,
345. Wyoming.
352. Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
p. 388; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 314; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 239, pl. 40, figs. 15-17; pl. 42, fig. 1.
4357. **Cissus haguei** Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, middle stratum,
Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 741, pl.
101, fig. 2.
346. **Cissus laevigata** Lesquereux. Illustrated specimens.
347. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 238,
pl. 40, figs. 12, 13.
349. **Cissus lobato-crenata** Lesquereux. Illustrated specimen.
Denver (Cret.). Mount Bross, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 240,
pl. 41, fig. 1.
350. **Cissus tricuspidata** Heer. Illustrated specimens.
806. Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 240,
pl. 41, figs. 6, 7.
3309. **Cladophlebis acuta** Fontaine. Types.
3772. Potomac (Low. Cret.). Hillside near Potomac Run; fish-
3816. ing hut above Dutch Gap Canal, Virginia.
3912. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 74, pl. 5, fig. 7; pl. 7,
3930. fig. 6; pl. 10, figs. 6, 7; pl. 11, figs. 7, 8; pl. 166, fig. 5.

3433. **Cladophlebis alata** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 77, 78, pl. 19, fig. 5.
8355. **Cladophlebis alata** Fontaine. Illustrated specimens.
8366. Jurassic. Cape Lisburne, Alaska.
8368. Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 158,
pl. 39, fig. 3; pl. 40, figs. 1, 7.
4002. **Cladophlebis alata** Fontaine. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 229,
pl. 45, fig. 20.
See *Pecopteris strictinervis*?
31579. **Cladophlebis alata** Fontaine? Illustrated specimen.
(3996) Shasta (Low. Cret.) Near Lowrey, Tehama County, California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 229,
pl. 45, fig. 21.
See *Cladophlebis inclinata*.
8354. **Cladophlebis alata** Fontaine. Illustrated specimens.
8356. Jurassic. Cape Lisburne, Alaska.
8359. Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 158,
8369. pl. 39, figs. 1-3, 5, 6, 9-11; pl. 40, fig. 3.
(2434) See *Aspidium oerstedii*.
3197. **Cladophlebis alata** Fontaine. Illustrated specimens.
3302. Potomac (Low. Cret.). Fredericksburg, Virginia, and
3810. Covington street, Baltimore, Maryland.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 158.
See *Pecopteris strictinervis*.
30972. **Cladophlebis auriculata** Fontaine. Type.
Triassic. Carbon Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, pl. 26, fig. 6.
3301. **Cladophlebis browniana** (Dunker) Seward. See *Pecopteris*
browniana. (Also catalogue numbers 3885 to 3887, 3922.)
31556. **Cladophlebis browniana** (Dunker) Seward. Illustrated specimen.
(3996) Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 226,
pl. 65, fig. 9.
See *Cladophlebis inclinata*.
3288. **Cladophlebis constricta** Fontaine. Type.
3817. Potomac (Low. Cret.). Fredericksburg; 72d milepost, near
Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 68, pl. 2, fig. 11; pl.
3, fig. 2; pl. 6, figs. 5, 6, 8-14; pl. 21, figs. 9, 13; pl. 169, fig. 2.

3277. *Cladophlebis crenata* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; 72d milepost, near
Brooke; hillside near Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 75, 76, pl. 9, figs.
7-9; pl. 10, figs. 1, 2; pl. 13, figs. 1-3; pl. 19, fig. 1; pl. 20, fig. 6.
3818. *Cladophlebis denticulata* Fontaine. Type.
3286. Potomac (Low. Cret.). Fredericksburg, and roadside near
Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 70, 71, pl. 4, fig. 2;
pl. 6, fig. 7.
3339. *Cladophlebis distans* Fontaine. Type.
3813. Potomac (Low. Cret.). Banks of Dutch Gap Canal; fish-
ing hut above canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 77, pl. 13, figs. 4, 5.
3391. *Cladophlebis dunkeri* (Schimper) Seward. See *Aspidium*
3324. *dunkeri*.
3828.
3200. *Cladophlebis falcata* Fontaine. Types.
3239. Potomac (Low. Cret.). Fredericksburg, Virginia.
3814. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 72, 73, pl. 4, fig. 8;
pl. 5, figs. 1-6; pl. 6, fig. 7; pl. 7, figs. 1, 2.
4006. *Cladophlebis falcata* Fontaine. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 227,
pl. 65, fig. 14.
See *Thinnfeldia variabilis*?
7427. *Cladophlebis heterophylla* Fontaine. Type.
Kootanie (Low. Cret.). Great Falls, Montana.
Fontaine, Proc. U. S. Nat. Mus., XV, 1892, p. 493, pl. 84, fig. 2.
8370. *Cladophlebis huttoni* (Dunker) Fontaine. Types.
to Jurassic? Cape Lisburne, Alaska.
8374. Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 161,
pl. 41.
8364. *Cladophlebis huttoni* (Dunker) Fontaine. Type.
(2436.) Jurassic? Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 161,
pl. 43, fig. 7.
See *Asplenium forsteri*.
8376. *Cladophlebis huttoni* (Dunker) Fontaine. Types.
to Jurassic? Cape Lisburne, Alaska.
8379. Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 161,
(2434.) pl. 42; pl. 43, figs. 1-6.
See *Aspidium oerstedii*.
3960. *Cladophlebis inæquiloba* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 80, pl. 25, fig. 8.

3386. *Cladophlebis inclinata* Fontaine. Types.
 3959. Potomac (Low. Cret.). Near telegraph station, Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 76, 77, pl. 10, figs. 3, 4; pl. 20, fig. 8.
3995. *Cladophlebis inclinata*? Fontaine. Supplemental type.
 Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894, p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Cladophlebis parva*.
3996. *Cladophlebis inclinata* Fontaine. Supplemental type.
 Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894, p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Cladophlebis alata*? (part).
 = *Cladophlebis browniana* (part).
3423. *Cladophlebis latifolia* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 69, 70, pl. 3, fig. 1; pl. 6, fig. 4.
3492. *Cladophlebis microphylla* Fontaine. Types.
 30970. Triassic. Clover Hill, Richmond Coal Field, Virginia.
 30971. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 51, pl. 27, fig. 2.
3430. *Cladophlebis oblongifolia* Fontaine. Type.
 Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 74, 75, pl. 7, figs. 3, 5.
3493. *Cladophlebis ovata* Fontaine. Types.
 Triassic. Clover Hill, Richmond Coal Field, Virginia.
 Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 50, pl. 26, fig. 5; pl. 27, fig. 3.
3287. *Cladophlebis pachyphylla* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 80, pl. 25, fig. 9.
3340. *Cladophlebis parva* Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 73, pl. 4, fig. 7; pl. 6, figs. 1-3.
3995. *Cladophlebis parva* Fontaine. Illustrated specimen.
 Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 225, pl. 65, fig. 8.
 See *Cladophlebis inclinata*.

3992. *Cladophlebis parva* Fontaine. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 225,
pl. 65, fig. 7.
See *Aspidium heterophyllum*.
5960. *Cladophlebis parva* Fontaine? Illustrated specimen.
Lakota (Low. Cret.). South Fork of Hay Creek, near
Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 657, pl. 160, fig. 18.
3312. *Cladophlebis rotundata* Fontaine. Type.
3815. Potomac (Low. Cret.). Fredericksburg, Deep Bottom,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 78, 79, pl. 20,
figs. 9, 10.
3406. *Cladophlebis sphenopteroides* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 79, pl. 21, fig. 4.
3993. *Cladophlebis ungeri* (Dunker) Ward. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 228,
pl. 65, fig. 16.
See *Aspidium dunkeri*.
8346. *Cladophlebis vaccensis* Ward. Type.
2526. Jurassic. Cape Lisburne, Alaska.
Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 157, pl. 39, fig. 7.
See *Pecopteris denticulata*.
3285. *Cladophlebis virginiensis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 70, 71, pl. 3, figs.
3-8; pl. 4, figs. 1, 3-6.
7370. *Cladophlebis wyomingensis* Fontaine. Type.
Lakota (Low. Cret.). East bank Oak Creek near Robbins's
Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 656, pl. 160, figs. 16, 17.
3341. *Cladophlebis* sp.? Fontaine.
Potomac (Low. Cret.). Fredericksburg; hillside at Poto-
mac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 76, pl. 10, figs. 5, 8;
pl. 20, fig. 7.
30965. *Clathropteris platyphylla expansa* Saporta.
30966. Illustrated specimen.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 54, pl. 33, fig. 1;
pl. 35, fig. 2.

534. *Coccoloba laevigata* Lesquereux. Illustrated specimen.
Laramie (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 208,
pl. 35, fig. 7.
- 4160 *Cocculus haydenianus* Ward. Types.
to Fort Union (Tert.). Burns's Ranch, twenty-eight miles
4164. below Glendive, and Iron Bluff, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 100, pl. 47, figs. 1-4;
pl. 48, fig. 1.
= *Cebatha haydeniana*.
50040. *Colutea primordialis* Heer. Illustrated specimen.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 148, pl. 13, fig. 8.
8247. *Comephyllum cristatum* Emmons. Type.
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 128, fig. 97.—Fontaine in
Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 311, pl. 47, fig. 3.
1373. *Comptonia cuspidata* Lesquereux. Type.
Upper Eocene (Tert.). Coal Harbor, Unga Island, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., V, 1882 [1883], p. 445.
= *Myrica cuspidata*.
1400. *Comptonia premissa* Lesquereux. Type.
Upper Eocene (Tert.). Chignik Bay, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., V, 1883, p. 445.
= *Myrica premissa*.
3279. *Conospermites ellipticus* Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 279, pl. 138, fig. 14.
10250. *Conostichus broadheadi* Lesquereux. Type.
Pottsville? (Penn.). Vernon County, Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 1, pl. B, figs. p. 1, 2; Text, I, 1880, p. 15.—White,
Mon. XXXVII, U. S. Geol. Surv., 1899, p. 12, pl. 2, figs. 1, 2.
10251. *Conostichus broadheadi* Lesquereux. Illustrated specimens.
Pottsville? (Penn.). Near Nevada and Fort Scott, Vernon
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 12, pl. 2,
figs. 3-5.
6035. *Conostichus prolifer* Lesquereux. Illustrated specimen.
Pottsville? (Penn.). Halfway between Nevada and Fort
Scott, Vernon County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 13, pl. 2, fig. 6.

19058. *Cordaianthus costatus* Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 17, pl. 80, fig. 1; Text, II, 1880, p. 540.
19212. *Cordaianthus dichotomus* Lesquereux. Type.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 16, pl. 76, figs. 6, 6b (as *C. gemmifer*); Text, II,
1880, p. 546.
See *Cordaianthus gemmifer*.
19216. *Cordaianthus ebracteatus* Lesquereux. Type.
Anthracite series, Coal A (Penn.). Boston mine, Pittston,
Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 844.
19217. *Cordaianthus flexuosus* Lesquereux. Type.
19218. Pottsville (Penn.). Campbells Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 802, pl. 109, fig. 2.
19187. *Cordaianthus gemmifer* Grand'Eury. Illustrated specimens.
19212. Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Proc. Am. Philos. Soc., XVII, 1878, p. 326, pl. 47, figs.
5, 5a, 6, 6b; Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 16, pl. 76, figs. 5, 5a, 6, 6b; Text, II, 1880, p. 545.
= *Cordaianthus ovatus* (part).
= *Cordaianthus dichotomus* (part).
19187. *Cordaianthus ovatus* Lesquereux. Type.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 16, pl. 76, figs. 5, 5a (as *C. gemmifer*); Text, II,
1880, p. 545.
See *Cordaianthus gemmifer*.
6073. *Cordaianthus ovatus* Lesquereux. Illustrated specimens.
19202. Cherokee, Des Moines (Penn.). Near Clinton, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv. 1899, p. 262, pl. 62, figs. 1, 2.
19214. *Cordaianthus rugosus* Lesquereux. Type.
Anthracite Series, Coal C (Penn.). Shamokin, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 803.
19211. *Cordaianthus rugosus scaber* Lesquereux. Type.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, p. 804.

19226. **Cordaianthus spicatus** Lesquereux. Type.
Pottsville (Penn.). Campbells Ledge, Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 802, pl. 109, fig. 1.
19007. **Cordaianthus simplex** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, II, 1880, p. 538.
See *Cordaites mansfieldi*.
25322. **Cordaicarpon apiculatum** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 17, pl. 83, fig. 6a; Text, II, 1880, p. 551.
25346. **Cordaicarpon cinctum** Lesquereux. Type.
25379. Anthracite series (Penn.) Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, pp. 804, 805, pl. 109, figs. 5, 6.
19059. **Cordaicarpon costatum** Lesquereux. Type.
19060. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 804, pl. 109, fig. 4.
See *Cordaites costatus*.
25328. **Cordaicarpon gutbieri** (Geinitz) Grand'Eury. Illustrated specimens.
to Allegheny (Penn.). Cannelton, Pennsylvania.
25332. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 17, pl. 83, figs. 8-11; Text, II, 1880, p. 549; III, 1884, p. 804, pl. 109, fig. 3.
25345. **Cordaicarpon lineatum** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 804, pl. 111, fig. 16.
25977. **Cordaicarpon mansfieldi** Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
25979. Lesquereux, Proc. Am. Philos. Soc., XVII, 1878, p. 321; Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 17, pl. 85, fig. 21, Text, II, 1880, p. 537, pl. 87, fig. 8.
25305. **Cordaicarpon ovatum** Grand'Eury. Illustrated specimen.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 17, pl. 83, fig. 7; Text, II, 1880, p. 550.
- Cordaicarpus.** See *Cordaicarpon*.
19168. **Cordaistrobus grand'euryi** Lesquereux. Types.
19169. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Proc. Am. Phil. Soc., XVII, 1878, p. 328, pl. 53, fig. 3;
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 17, pl. 82, figs. 3, 4, 4a; Text, II, 1880, p. 552.

18946. *Cordaites communis* Lesquereux. Types.
 18947. Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Proc. Am. Phil. Soc. XVII, 1878, p. 320; Coal Flora,
 Second Geol. Surv. Pa., Rept. Prog. P, Text, II, 1880, p. 534.
5418. *Cordaites communis* Lesquereux. Illustrated specimens.
 5546. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 5702. Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv. 1899, p. 260, pl. 3, fig. 1;
 pl. 16, pl. 46.
19059. *Cordaites costatus* Lesquereux. Types.
 19060. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Proc. Am. Phil. Soc., XVII, 1878, p. 323, pl. 51, figs.
 1-1b; XVIII, 1879, p. 222, pl. 3, figs. 1, 2; Coal Flora, Second
 Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 17, pl. 80, figs. 1a,
 1b; Text, II, 1880, p. 540, pl. 86, figs. 1, 2.
 = *Cordaicarpus costatum*.
19160. *Cordaites gracilis* Lesquereux. Type.
 Allegheny (Penn.). Morris, Illinois.
 Lesquereux, Proc. Am. Phil. Soc., XVII, 1878, p. 322, pl. 48, figs.
 4, 4b; Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas,
 1879, p. 16, pl. 77, figs. 4-4b; Text, II, 1880, p. 539.
19103. *Cordaites grandifolius* Lesquereux. Types.
 to Pottsville (Penn.). Campbells Ledge, Pittston, Penn-
 19105. sylvania.
 Lesquereux, Proc. Am. Phil. Soc., XVII, 1878, p. 318, pl. 48, figs. 1, 2.
 2a; Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P., Atlas,
 1879, p. 16, pl. 77, figs. 1, 2; Text, II, 1880, p. 530.
18917. *Cordaites lacei* Lesquereux. Types.
 to Anthracite series, Coal E (Penn.). Butler mine, Camp-
 18919. bell's Ledge, Pittston, Pennsylvania.
 18921. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P; Text,
 II, 1880, p. 535, pl. 87, figs. 2-4.
19006. *Cordaites mansfieldi* Lesquereux. Types.
 19007. Allegheny (Penn.). Cannelton, Pennsylvania.
 19017. Lesquereux, Proc. Am. Phil. Soc., XVII, 1878, p. 321, pl. 47, figs.
 4-4b; pl. 49, figs. 1, 1b, 2; Coal Flora, Second Geol. Surv. Pa.,
 Rept. Prog. P, Atlas, 1879, p. 16, pl. 76, figs. 4-4b; pl. 78, figs.
 1, 2; Text, II, 1880, p. 537.
 19007 = *Cordaianthus simplex* (pl. 76, figs. 4, 4a).
18907. *Cordaites radiatus* Lesquereux. Types.
 18908. Allegheny (Penn.). Cannelton, Pennsylvania.
 18911. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text,
 II, 1880, p. 540, pl. 87, figs. 5, 6.
19033. *Cordaites serpens* Lesquereux. Types.
 to Allegheny (Penn.). Cannelton, Pennsylvania.
 19036. Lesquereux, Proc. Am. Phil. Soc., XVII, 1878, p. 324, pl. 50, figs. 1-4;
 Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879,
 p. 17, pl. 79, figs. 1, 1a, 2, 3, 4; Text, II, 1880, p. 542.

26421. *Cordaites squammiferus* (Lesquereux) David White. Type.
Pennsylvanian. Osage, Kansas.
David White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 108.
4155. *Cornus emmonsii* Ward. Types.
4156. Montana (Cret.). Point of Rocks, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 55, pl. 26, figs. 2, 3.
= *Cornus impressa*.
5357. ? *Cornus fosteri* Ward. Type.
Fort Union (Tert.). Upper Seven Mile Creek, ten miles
above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 54, pl. 25, fig. 5.
2454. *Cornus hyperborea* Heer. Illustrated specimen.
Eocene (Tert.). Lassen County, California.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 29, pl. 15, fig. 3.
354. *Cornus impressa* Lesquereux. Type.
Denver (Cret.). Mount Bross, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 408; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 243, pl. 42, fig. 3.
4155. *Cornus impressa* Lesquereux. See *Cornus emmonsii*.
4156.
4406. *Cornus newberryi* Hollick. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, one mile below
mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 749,
pl. 103, fig. 6.
50141. *Cornus platyphylloides* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 126, pl. 64,
fig. 15.
357. *Cornus rhamnifolia* Weber. Illustrated specimen.
Montana (Cret.). Near Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 244,
pl. 42, fig. 6.
355. *Cornus studeri*? Heer. Illustrated specimens.
356. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 244,
pl. 42, figs. 4, 5.
4154. *Cornus studeri*? Heer. Illustrated specimen.
Montana (Cret.). Point of Rocks, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 55, pl. 26, fig. 1.
353. *Cornus suborbifera* Lesquereux. Type.
Laramie (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 243,
pl. 42, fig. 2.

4424. **Cornus wrightii** Knowlton. Type.
Miocene (Tert.). Fossil Forest section, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 749,
pl. 103, figs. 4, 5.
4209. **Corylus americana** Walter. Illustrated specimens.
4212. Fort Union (Tert.). Seven Mile Creek, below Glendive,
5314. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 28, pl. 11, figs. 3-5;
pl. 12, figs. 1, 2.
- 553 **Corylus americana** Walter. Illustrated specimens.
to Fort Union (Tert.). Fort Union, North Dakota.
555. Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 59; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 14, figs. 8, 9, 10.
= *Corylus americana fossilis*.
- 553 **Corylus americana fossilis** Newberry. Types.
to Fort Union (Tert.). Fort Union, North Dakota.
555. Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 60, pl. 29, figs.
8-10.
See *Corylus americana*.
4207. **Corylus fosteri** Ward. Types.
4208. Fort Union (Tert.). Head of Clear Creek, above Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 29, pl. 13, figs. 5, 6.
558. **Corylus grandifolia** Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 59; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 15, fig. 5.
= *Corylus macquarrii*.
30072. **Corylus harrimani** Knowlton. Type.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 156, pl. 23, fig. 1.
535. **Corylus macquarrii** (Forbes) Heer. Illustrated specimen.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 144,
pl. 18, fig. 10.
7076. **Corylus macquarrii** (Forbes) Heer. Illustrated specimen.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 61, pl. 48, fig. 4.
558. **Corylus macquarrii** (Forbes) Heer. Illustrated specimen.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 61, pl. 32, fig. 5.
See *Corylus grandifolia*.

4206. ?*Corylus macquarrii* (Forbes) Heer. Illustrated specimen.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 30, pl. 13, fig. 7.
5060. *Corylus macquarrii* (Forbes) Heer. * Illustrated specimen.
Miocene (Tert.). Middle Station, Fossil Forest, Yellow-
stone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 699, pl. 86,
fig. 3.
5398. *Corylus macquarrii* (Forbes) Heer. Illustrated specimens.
Eocene (Tert.). Herendeen Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 219, pl. 9, fig. 4.
6969. *Corylus orbiculata* Newberry. Type.
Fort Union (Tert.). Near Fort Union, Buford County,
North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 58; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 15, fig. 4;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 62, pl. 32, fig. 4.
30069. *Corylus* ? *palachei* Knowlton. Types.
30083. Eocene (Tert.). Kukak Bay, Alaska.
30095. Knowlton, Harriman Alaska Exped., IV, 1904, p. 156, pl. 22, fig. 2;
pl. 28, fig. 1.
557. *Corylus rostrata* Aiton. Illustrated specimens.
6979. Fort Union (Tert.). Fort Union, North Dakota.
6980. Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 60; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 15, figs. 1-3.
= *Corylus rostrata fossilis*.
4213. *Corylus rostrata* Aiton. Illustrated specimens.
to Fort Union (Tert.). Seven Mile Creek, below Glendive,
4216. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 29, pl. 13, figs. 1-4.
557. *Corylus rostrata fossilis* Newberry. Types.
6979. Fort Union (Tert.). Fort Union, Buford County, North
6980. Dakota.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 63, pl. 32, figs.
1-3.
See *Corylus rostrata*.
483. *Cratægus* ? *æquidentata* Lesquereux. Types.
819. Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 297,
pl. 58, figs. 4, 4a.
7088. *Cratægus flavescens* Newberry. Type.
Upper Eocene (Tert.) Bridge Creek, Crook County,
Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 507; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 112, pl. 48, fig. 1.

- 1647 *Cratægus flavescens* Newberry. Supplemental type.
to Green River (Tert.). Florissant, Colorado.
1651. Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 77.
See *Myrica diversifolia*.
8489. *Cratægus flavescens* Newberry. Illustrated specimen,
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 66, pl. 10, fig. 1.
2380. *Cratægus holmesii* Lesquereux. Type.
Denver (Cret.). Silver Cliff, Colorado.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 43, pl. 3, figs. 7-9.
8513. *Cratægus imparilis* Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, pp. 66, 67, pl. 10,
fig. 2.
50140. *Cratægus lacoiei* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 143, pl. 64,
fig. 14.
2458. *Cratægus marcouiana* Lesquereux. Type.
Horizon unknown. "Fossil Point, P. Y. Sheet."
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 36, pl. 15, figs. 1, 2.
2459. *Cratægus marcouiana subintegrifolia* Lesquereux. Type.
Horizon unknown. "Fossil Point, P. Y. Sheet."
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 36, pl. 14, fig. 2.
2699. *Cratægus tenuinervis* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 142, pl. 54,
fig. 6.
4192. ? *Credneria daturæfolia* Ward. Type.
4200. Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 97, pl. 13, fig. 4; pl.
43, figs. 1, 2; pl. 44, figs. 1-3; pl. 45, figs. 1, 2.
4352. *Credneria? pachyphylla* Knowlton. Type.
5129. Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 742, pl.
101, fig. 6.
3325. *Ctenis imbricata* Fontaine. Type.
Potomac (Low. Cret.) Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 177, pl. 138, figs.
10-12.

3464. **Ctenophyllum braunianum** Geoppert. Illustrated specimens.
Triassic. Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 69, pl. 34, figs. 2-4;
pl. 35, fig. 1; pl. 37, figs. 1-2; pl. 38, figs. 1-2.
- 8217 **Ctenophyllum braunianum angustum** (Fr. Braun) Ward. Illustrated specimens.
to Triassic. Chatham County, North Carolina.
8219. Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 291, pl. 39, figs. 6, 7.
See *Dionites linearis*, *Podozamites longifolius*, and
Pterozamites spatulatus.
30977. **Ctenophyllum giganteum** Fontaine. Type.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 76, pl. 39, fig. 5.
30880. **Ctenophyllum grandifolium** Fontaine. Type.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 73, pl. 39, fig. 3.
3372. **Ctenophyllum latifolium** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 175, pl. 68, figs. 2, 3.
8220. **Ctenophyllum lineare** (Emmons) Fontaine. Type.
Triassic. House's quarry, Haw River, Chatham County,
North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 114, pl. 54, fig. 2;
in Ward, Twentieth Ann. Rept. U. S. Geol. Surv. Pt. II, 1900,
p. 293.
8221. **Ctenophyllum robustum** (Emmons) Fontaine. Type.
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 116, pl. 54, fig. 7;
in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 294.
See *Pterophyllum robustum*.
30883. **Ctenophyllum taxinum** (Lindley and Hutton) Fontaine. Illustrated specimen.
Triassic. Midlothian, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 67, pl. 33, fig. 3.
30879. **Ctenophyllum truncatum** Fontaine. Type.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 68, pl. 38, fig. 5.
3434. **Ctenopteris angustifolia** Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run (Fred-
ericksburg area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 159, pl. 65, fig. 2;
pl. 67, fig. 4.

3203. *Ctenopteris insignis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; roadside near
Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 156, pl. 61, figs.
4, 5; pl. 62, fig. 1; pl. 63, figs. 1, 3.
3384. *Ctenopteris integrifolia* Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run; Fred-
ericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 158, 159; pl. 62,
fig. 2; pl. 65, fig. 3.
3450. *Ctenopteris longifolia* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 159, pl. 67, fig. 5.
3347. *Ctenopteris minor* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 157, 158, pl. 67,
fig. 3.
3305. *Ctenopteris virginienensis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 157, pl. 62, fig. 4;
pl. 65, fig. 1; pl. 66, fig. 4.
1412. *Cucumites lesquereuxii* Knowlton. Type.
Miocene? (Tert.). Brandon, Vermont.
Knowlton, Bull. Torrey Bot. Club, XXIX, 1902, pp. 640, 641, pl. 25,
figs. 3, 4.
7661. *Cunninghamites* sp. Knowlton.
Montana (Cret.). North Fork Dutton Creek, Laramie
Plains, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 29, pl. 5, fig. 3.
3652. *Cupressinoxylon arkansanum* Knowlton. Types.
3660. Orange sand (Tert.). Little Crow Creek, Arkansas.
3661. Knowlton, Ann. Rept. Geol. Surv. Ark. for 1889, II, 1890, p. 253,
pl. 9, figs. 1, 2.
3653. *Cupressinoxylon calli* Knowlton. Type.
Tertiary. Northwest of Gainesville, Green County,
Arkansas.
Knowlton, Ann. Rept. Geol. Surv. Ark. for 1889, Vol. II, 1890,
p. 254, pl. 9, figs. 3-7.
3649. *Cupressinoxylon columbianum* Knowlton. Types.
3650. Potomac (Low. Cret.). Dutch Gap Canal, James River,
Virginia.
Knowlton, Bull. No. 56, U. S. Geol. Surv., 1889, p. 49, pl. 4, fig. 5;
pl. 5, figs. 3, 4; pl. 6, figs. 1-5; pl. 7, fig. 1.
3641. *Cupressinoxylon elongatum* Knowlton. Type.
Fort Union (Tert.). Glendive, Dawson County, Montana.
Knowlton, Proc. U. S. Nat. Mus., XI, 1888, p. 7, pl. 3, figs. 1-4.

3642. *Cupressinoxylon glasgowi* Knowlton. Type.
Cretaceous? Emmet County, Iowa.
Knowlton, Proc. U. S. Nat. Mus., XI, 1888, p. 6, pl. 2, figs. 1-5.
- 3046 *Cupressinoxylon mcgeei* Knowlton. Types.
to Potomac (Low. Cret.). Washington, District of Columbia.
3048. Knowlton, Bull. No. 56, U. S. Geol. Surv., 1889, p. 46, pl. 2, fig. 5;
pl. 3, figs. 1-5.
3643. *Cupressinoxylon pulchellum* Knowlton. Type.
Potomac (Low. Cret.). Spring Hill, Appomattox River,
Virginia.
Knowlton, Bull. No. 56, U. S. Geol. Surv., 1889, p. 45, pl. 2, figs. 1-4.
3644. *Cupressinoxylon wardi* Knowlton. Types.
3645. Potomac (Low. Cret.). Near Montello, District of Co-
lumbia and Neabsco Creek, Virginia.
Knowlton, Bull. No. 56, U. S. Geol. Surv., 1889, p. 48, pl. 4, figs.
1-4; pl. 5, figs. 1, 2.
8805. *Cycadeoidea colei* Ward. Type.
Lakota (Low. Cret.). Southwest of Minnekahta, Fall River
County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 619,
pls. 110-112.
8807. *Cycadeoidea colossalis* Ward. Type.
Lakota (Low. Cret.). Southwest of Minnekahta, Fall River
County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, pp.
603, 604, pls. 67, 68.
8804. *Cycadeoidea dacotense* (McBride) Ward. Illustrated specimen.
Lakota (Low. Cret.). Southwest of Minnekahta, Fall River
County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 602,
pls. 62, 63.
8232. *Cycadeoidea emmonsi* (Fontaine) Ward. Type.
Triassic. Chatham County, North Carolina.
Emmons, Amer. Geol., VI, 1857, p. 124, fig. 92a (unnamed).—
Ward, Proc. Biol. Soc. Wash., IX, 1894, p. 86; Twentieth Ann.
Rept. U. S. Geol. Surv., Pt. II, 1900, p. 302, pl. 43, fig. 3.
8820. *Cycadeoidea excelsa* Ward. Type.
Lakota (Low. Cret.). Near Hot Springs, Fall River
County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 637,
pls. 153-155.
- 8821 *Cycadeoidea jenneyana* Ward. Types.
to Lakota (Low. Cret.). Near Minnekahta, Blackhawk and
8825. Black's ranch, Meade County, South Dakota.
Ward, Proc. Biol. Soc. Wash., IX, 1894, p. 87, Nineteenth Ann.
Rept. U. S. Geol. Surv., Pt. II, 1900, p. 627.

- 8809 *Cycadeoidea mcbridei* Ward. Type.
to Lakota (Low. Cret.). Southwest of Minnekahta, Fall River
8814. County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 612,
pls. 91-93.
8827. *Cycadeoidea minima* Ward. Type.
Lakota (Low. Cret.). Southeast of Minnekahta, Fall River
County, South Dakota.
Ward, Amer. Journ. Sci., X, 1900, p. 341.
8808. *Cycadeoidea minnekahtensis* Ward. Type.
Lakota (Low. Cret.). Southwest of Minnekahta, Fall River
County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 606,
pl. 76-79.
- 8815 *Cycadeoidea occidentalis* Ward. Type.
to Lakota (Low. Cret.). Southwest of Minnekahta, Fall River
8818. County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 626,
pl. 120.
8065. *Cycadeoidea paynei* Ward. Types.
8066. Lakota (Cret.). Near Minnekahta, Fall River County,
South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 620,
pls. 113-115.
8828. *Cycadeoidea protea* Ward. Type.
Lakota (Low. Cret.). Bradley's Flat, southwest of Min-
nekahta, Fall River County, South Dakota.
Ward, Amer. Journ. Sci., X, 1900, p. 343.
8806. *Cycadeoidea pulcherrima* Ward. Type.
Lakota (Cret.). Southwest of Minnekahta, Fall River
County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 608,
pls. 80-82.
8826. *Cycadeoidea stillwelli* Ward. Type.
Lakota (Low. Cret.) Black's Ranch, north of Blackhawk,
Meade County, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 635,
pl. 147.
2316. *Cycadeospermum æquilaterale* Lesquereux. Type.
Jurassic. Oxford, England.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 32.
3954. *Cycadeospermum angustum* Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 271, pl. 135, fig. 20.
3436. *Cycadeospermum ellipticum* Fontaine. Type.
3904. Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal;
Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 271, pl. 135, fig. 19.

- 2318½. *Cycadeospermum faboideum* Lesquereux. Type.
Jurassic. Oxford, England.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 33.
50024. *Cycadeospermum lineatum* Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 30, pl. 1, fig. 14.
3756. *Cycadeospermum rotundatum* Fontaine. Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 279, pl. 43, fig. 6.
7416. *Cycadeospermum rotundatum* Fontaine. Illustrated specimen.
Lakota (Low. Cret.). Near Robbins's Ranch, Oak Creek, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 667, pl. 162, fig. 19.
3955. *Cycadeospermum spatulatum* Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 271, pl. 135, figs. 11, 12.
2319. *Cycadeospermum subfalcatum* Lesquereux? Type.
Jurassic. Oxford, England.
Lesquereux, Proc. U. S. Nat. Mus. X, 1887, p. 33.
8229. *Cycadites acutus* Emmons. Type.
Triassic. Lockville or Jones Falls, Chatham County, North Carolina.
Emmons, Geol. Rept. Midland Counties of North Carolina, 1856, p. 330; Amer., Geology, VI, 1857, p. 114, fig. 81.—Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 109, pl. 51, fig. 3; in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 300.
3498. *Cycadites tenuinervis* Fontaine. Type.
Triassic. Hanover County, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 84, pl. 44, figs. 4-6.
8230. *Cycadites tenuinervis* Fontaine. Illustrated specimen.
Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 300, pl. 43, fig. 1.
8793. *Cyclocladia brittsii* David White. Type.
Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 169, pl. 49, fig. 1.
8326. *Cyclopteris* cf. *acadica* Dawson. Illustrated specimen.
Upper Devonian. Near Penn Yan, Yates County, New York.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 107, pl. 9, fig. 2.

1295. *Cyclopteris* (*Archæopteris*) *alleghanensis* Meek. Type.
Pocono (Miss.). Lewis tunnel, West Virginia.
Meek, Bull. Phil. Soc. Washington, II, 1875-1880, Appendix, p. 43,
pl. 1, figs. 2a, b.
= *Triphylopteris alleghanensis*.
2190. *Cyclopteris*? (*Archæopteris*) *lescuriana* Meek. Type.
Pocono (Miss.). Lewis tunnel, West Virginia.
Meek, Bull. Phil. Soc. Washington, II, 1875-1880, Appendix, p. 41,
pl. 2, figs. 1, a, b, c.
= *Triphylopteris lescuriana*.
2008. *Cyclopteris virginensis* Meek. Type.
Pocono (Miss.). Lewis Tunnel, West Virginia.
Meek, Bull. Phil. Soc. Washington, II, 1879-1880, Appendix, p. 43,
pl. 1, figs. 3, a, b, c.
= *Triphylopteris virginiana*.
5066. *Cyperacites giganteus* Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile below
mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 684,
pl. 82, fig. 10.
1564. *Cyperacites haydenii* (Lesquereux) Knowlton. Types.
1565. Green River (Tert.). Northeast of Randolph, Uinta County,
Wyoming.
Knowlton Bull. No. 152, U. S. Geol. Surv., 1898, p. 83.
See *Cyperites haydenii*.
8542. *Cyperacites* sp. Knowlton.
Mascall beds, Miocene (Tert.). South Fork of John Day
River, about twelve miles west of Mount Vernon, Grant
County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 28, pl. 1, fig. 9.
4496. *Cyperacites* sp. Knowlton.
Fort Union (Tert.). Northeast side of Crescent Hill, Yel-
lowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 685,
pl. 83, fig. 6.
1564. *Cyperites haydenii* Lesquereux. Types.
1565. Green River (Tert.). Northeast of Randolph, Uinta
County, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv., Terr., VIII, Pt. III, 1883,
p. 140, pl. 23, figs. 1, 2.
= *Cyperacites haydenii*.
4495. *Cyperites* sp. Knowlton.
Miocene (Tert.). Cliff west of Fossil Forest Ridge, Yel-
lowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 684,
pl. 83, fig. 4.

122. **Cyperus chavanensis** Heer. Illustrated specimen.
Green River (Tert.). Green River Station, Wyoming.
(Evanston, Utah?).
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 92,
pl. 9, fig. 1.
= *Cyperus chavannesi*.
122. **Cyperus chavannesi** Heer. Illustrated specimen.
Green River (Tert.). Green River Station, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 84.
See *Cyperus chavanensis*.
1916. **Cytisus florissantianus** Lesquereux. Types.
1917. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 200,
pl. 39, fig. 14.
1913. **Cytisus modestus** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1915. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
200, pl. 39, figs. 9-11.
7332. **Czekanowskia nervosa** Heer. Illustrated specimens.
7333. Lakota (Low. Cret.). Webster's Ranch, northeast of Beulah,
Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p.
685, pl. 169, figs. 1, 2.
1178. **Dammarites caudatus** Lesquereux. Illustrated specimen.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 32, pl. 1, fig. 10.
12710. **Danaëites emersoni** Lesquereux. Types.
12711. Monongahela (Penn.). St. Clairsville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 6, pl. 28, figs. 1, 2; Text, I, 1880, p. 157.
12718. **Danaëites macrophyllus** (Newberry) Lesquereux.
12719. Illustrated specimens.
Pottsville (Penn.). Youngstown, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 5, pl. 25, figs. 4, 5, 6, 6a; Text, I, 1880, p. 159.
8207. **Danaëopsis?** sp. Fontaine.
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 284, pl. 38, fig. 7.
317. **Daphnogene anglica?** Heer. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 222,
pl. 37, fig. 9.

642. *Daphnogene cretacea* Lesquereux. Type.
Dakota (Cret.). Western Kansas.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 343.
= *Cinnamomum scheuchzeri*.
2807. *Daphnophyllum dakotense* Lesquereux. Types.
2808. Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 99, pl. 51, fig. 2;
pl. 52, fig. 1.
10259. *Dechenia striata* Lesquereux. Type.
Allegheny (Penn.). Alta, Peoria County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas,
1879, p. 12, pl. 67, fig. 3; Text, II, 1880, p. 430.
19251. *Desmiophyllum gracile* Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, pp. 556, 557, pl. 82, fig. 1.
4366. *Devallia?* *montana* Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, Yellowstone Na-
tional Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 671, pl. 79,
fig. 4.
3994. *Dicksonia pachyphylla* Fontaine. Type.
Shasta (Low. Cret.). Near Lowrey, Tehama County, Cali-
fornia.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 224, pl.
65, fig. 1.
See *Asplenopteris pinnatifida?*
8365. *Dicksonia saportana* Heer. Illustrated specimen.
(2435) Jurassic. Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 155,
pl. 39, figs. 1, 2.
See *Asplenium dicksonianum*.
25108. *Dicranophyllum dichotomum* Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, p. 553, pl. 83, fig. 9.
25104. *Dicranophyllum dimorphum* Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
25106. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, p. 554, pl. 83, figs. 1, 3.
6076. *Dicranophyllum?* sp. David White.
Cherokee, Des Moines (Penn.). Hobbs's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 272, pl. 41, fig. 10;
pl. 73, fig. 1.

10200. *Dictyocordaites lacoii* Dawson. Type.
Catskill (Dev.). Meshoppen, Pennsylvania.
Dawson, Can. Rec. Sci., IV., 1890, pp. 2, 3, text fig. 1.
5406. *Dictyotites fasciolatus* Penhallow. Types.
25098. Upper Chemung or Catskill, Erian (Dev.). Lanesboro,
Susquehanna County, and Factoryville, Wyoming
County, Pennsylvania.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 110, pl. 11,
fig. 10a; pl. 12, fig. 10b.
5407. *Dictyotites maximus* Penhallow. Type.
Marcellus shales, Erian (Dev.). Union Springs, Cayuga
Lake, New York.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 111, pl. 11, fig. 11.
3215. *Dioönites buchianus* (Ettingshausen) Bornemann.
3773. Illustrated specimens.
3775. Potomac (Low. Cret.). James River, entrance to Trent's
3776. Reach; banks of Dutch Gap Canal; fishing hut above
canal; Kankeys, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 182-184, pl. 68,
fig. 1; pl. 69, figs. 1, 3; pl. 70, figs. 2, 3; pl. 71, fig. 1; pl. 72,
figs. 1, 2; pl. 73, figs. 1-3; pl. 74, figs. 1-3.
3216. *Dioönites buchianus angustifolius* Fontaine. Types.
3799. Potomac (Low. Cret.) Dutch Gap Canal; fishing hut above
canal; Kankey's; crossing of the Occoquan, near
telegraph station, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 185, pl. 67, fig. 6;
pl. 68, fig. 4; pl. 71, fig. 2.
3739. *Dioönites buchianus angustifolius* Fontaine.
Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 265, pl. 36, fig. 6.
3180. *Dioönites buchianus obtusifolius* Fontaine. Type.
Potomac (Low. Cret.). Left bank Dutch Gap Canal,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 184, 185, pl. 168,
fig. 3.
3736. *Dioönites buchianus rarinervis* Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 264, pl. 36, figs. 3, 4.
3738. *Dioönites dunkerianus* (Goeppert) Miquel.
Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 265, pl. 36, fig. 12;
pl. 37, fig. 1.
8218. *Dioönites linearis* Emmons. Type.
Triassic. Chatham County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 121, pl. 4, fig. 11.
= *Ctenophyllum braunianum angustum*.

617. *Diospyros ambigua* Lesquereux. Type.
Dakota (Cret.). Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 60;
Mon. XVII, U. S. Geol. Surv., 1892, p. 110.
See *Diospyros anceps* and *Quercus anceps*.
617. *Diospyros anceps* Lesquereux. Type.
Dakota (Cret.). Salt Creek, ten miles below Lancaster
Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 89,
pl. 6, fig. 6.
= *Diospyros ambigua*.
See *Quercus anceps*.
50075. *Diospyros apiculata* Lesquereux. Type.
Dakota (Cret.). In Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 110, pl. 14, fig. 3.
338. *Diospyros brachysepala* Al. Braun. Illustrated specimens.
339. Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 232,
pl. 40, figs. 7, 8.
340. *Diospyros brachysepala* Al. Braun. Illustrated specimen.
Montana? (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 232,
pl. 63, fig. 6.
337. *Diospyros brachysepala* Al. Braun. Illustrated specimen.
Denver? (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 232,
pl. 40, fig. 10.
See *Rhamnus inæqualis*.
4165. *Diospyros brachysepala* Al. Braun. Illustrated specimens.
4166. Fort Union (Tert.). Burns's Ranch, and Seven Mile Creek,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 104, pl. 49, figs. 1, 2.
342. *Diospyros copeana* Lesquereux. Type.
Green River (Tert.). Elko, Nevada.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 414; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 322, pl. 40, fig. 11.
8556. *Diospyros elliptica* Knowlton. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, pp. 83, 84, pl. 16,
fig. 5.
336. *Diospyros? ficoidea* Lesquereux. Types.
341. Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878 p. 231,
pl. 40, figs. 5, 6.

4167. *Diospyros ficoidea* Lesquereux. Illustrated specimens.
 4168. Fort Union (Tert.). Burns, Ranch and Clear Creeks,
 Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 105, pl. 49, figs. 3, 4.
4393. *Diospyros haguei* Knowlton. Type.
 Fort Union (Tert.). Yellowstone River, one-half mile
 below the mouth of Elk Creek, Yellowstone National
 Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 752,
 pl. 100, fig. 3.
4348. *Diospyros lamarensis* Knowlton. Types.
 4378. Miocene (Tert.). Specimen Ridge, Fossil Forest; Lamar
 River between Cache and Chalfee creeks, Yellowstone
 National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 751,
 pl. 95, figs. 5, 6; pl. 96, fig. 4.
4169. ? *Diospyros obtusata* Ward. Type.
 Fort Union (Tert.). Seven Mile Creek, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 105, pl. 49, fig. 5.
6899. *Diospyros primæva* Heer. Illustrated specimen.
 Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
 Newberry, U. S. Geol. Surv. Terr., Ill. Cret. and Tert. Plants, 1878,
 pl. 3, fig. 8.
 = *Phyllites vanonæ*.
647. *Diospyros rotundifolia* Lesquereux. Type.
 Dakota (Cret.). Western Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 89,
 pl. 30, fig. 1.
2461. *Diospyros virginiana turneri* Lesquereux. Type.
 Miocene (Tert.). Contra Costa County, California.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 35.
490. *Diospyros wodani* Unger. Illustrated specimen.
 Laramie (Cret.). Evanston, Wyoming.
 Lesquereux Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 233,
 pl. 59, figs. 1, 3.
 See *Calycites hexaphylla*.
19. *Diplazium mülleri?* Heer. Illustrated specimens.
 Denver? (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 55,
 pl. 4, fig. 10.
 = *Asplenium* (*Diplazium*) *crossii*.
19617. *Dolerophyllum pennsylvanicum* Dawson. Types.
 19618. Pennsylvanian. Mazon Creek, Grundy Co., Illinois, and
 Olyphant, Pennsylvania.
 Dawson, Canadian Record Sci., IV, No. 1, 1890, pp. 7, 8.
 = *Doleropteris pennsylvanica*.

19617. *Doleropteris pennsylvanica* (Dawson) David White. Types.
 19618. Pennsylvanian. Mazon Creek, Illinois. Anthracite series
 (Penn.). Olyphant, Pennsylvania.
 White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 107.
 See *Dolerophyllum pennsylvanicum*.
382. *Dombeyopsis grandifolia* Unger. Illustrated specimen.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 255,
 pl. 47, fig. 6.
380. *Dombeyopsis obtusa* Lesquereux. Illustrated specimens.
 381. Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 266,
 pl. 47, figs. 4, 5.
377. *Dombeyopsis platanoides* Lesquereux. Types.
 378. Laramie (Cret.). Above Spring Canyon, near Fort Ellis,
 Montana.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, 254,
 pl. 47, figs. 1, 2.
 See *Quercus platania rotundifolia*.
5206. *Dombeyopsis platanoides* Lesquereux. Illustrated specimen.
 Laramie (Cret.). Top of Mount Evarts, west face, Yellow-
 stone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 661,
 pl. 78, fig. 1.
379. *Dombeyopsis trivialis* Lesquereux. Illustrated specimen.
 Laramie (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 255,
 pl. 47, fig. 3.
4119. *Dryophyllum aquamarum* Ward. Types.
 to Laramie (Cret.). Black Buttes, Wyoming.
 4121. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 26, pl. 10, figs. 2-4.
 4123.
4122. *Dryophyllum basidentatum* Ward. Type.
 Laramie? (Cret.). Carbon Station, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 27, pl. 11, fig. 2.
 = *Quercus carbonensis*.
4117. *Dryophyllum bruneri* Ward. Types.
 4118. Montana (Cret.). Point of Rocks, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 27, pl. 10, figs. 5, 6.
 = *Dryophyllum subfalcatum*.
4124. *Dryophyllum bruneri* Ward. Types.
 4125. Laramie (Cret.). Hodge's Pass, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 27, pl. 10, figs. 7, 8.
 = *Dryophyllum subfalcatum*.

195. *Dryophyllum crenatum* Lesquereux. Types.
 196. Montana (Cret.). Point of Rocks, Wyoming.
 Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
 p. 371; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 301; Ibid., 1876 [1878], p. 506; Rept. U. S. Geol. Surv.
 Terr., VII, Pt. II, 1878, p. 162, pl. 62, figs. 10, 11.
4126. *Dryophyllum falcatum* Ward. Type.
 Laramie (Cret.). Hodge's Pass, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 27, pl. 11, fig. 1.
616. *Dryophyllum (Quercus) holmesii* Lesquereux. Type.
 Dakota (Cret.). San Juan River, southwest Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 38,
 pl. 4, fig. 8.
 = *Quercus holmesii*.
 See *Dryophyllum (Quercus) salicifolium*.
614. *Dryophyllum latifolium* Lesquereux. Illustrated specimen.
 Dakota? (Cret.). Fort Harker, Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 37,
 pl. 4, fig. 2.
 = *Quercus (Dryophyllum) latifolia*.
4318. *Dryophyllum longipetiolatum* Knowlton. Types.
 4379. Miocene (Tert.). Fossil Forest Ridge, bed No. 7, Yellow-
 4380. stone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 710, pl.
 88, figs. 6, 7.
615. *Dryophyllum primordiale* Lesquereux. Type.
 Dakota (Cret.). Fort Harker, Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 37.
 = *Quercus primordialis*.
616. *Dryophyllum (Quercus) salicifolium* Lesquereux. Type.
 Dakota? (Cret.). San Juan River, southwest Colorado.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 340, pl. 8, fig. 2.
 = *Quercus holmesii* Lesqx.
 See *Dryophyllum (Quercus) holmesii*.
4117. *Dryophyllum subfalcatum* Lesquereux. See *Dryophyllum*
bruneri. (Also catalogue numbers 4118, 4124, 4125.)
3826. *Dryopteris angustipinnata* (Fontaine) Knowlton. Type.
 3269. Potomac (Low. Cret.). Entrance to Trent's Reach; fish
 hut above Dutch Gap Canal; Fredericksburg; hillside
 near Potomac Run, Virginia.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 91.
 See *Aspidium angustipinnatum*.
3152. *Dryopteris angustipinnata montanense* (Fontaine) Knowl-
 ton. Type.
 Kootanie (Low. Cret.). Great Falls, Montana.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 91.
 See *Aspidium angustipinnatum montanense*.

12. *Dryopteris arguta* (Lesquereux) Knowlton. Type.
Denver (Cret.). Golden, Colorado.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 91.
See *Lastrea arguta*. Also *Aspidium lakesii* (33641-33643), *Sphenopteris lakesii* (15), and *S. membranacea* (11).
3374. *Dryopteris cystopteroides* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 91.
See *Aspidium cystopteroides*.
3437. *Dryopteris dentata* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.). Banks of Dutch Gap Canal; hillside near Potomac Run; near telegraph station, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 91.
See *Aspidium dentatum*.
3967. *Dryopteris elliptica* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.). Hillside near Potomac Run; bank near Brooke, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium ellipticum*.
3913. *Dryopteris fredericksburgense* (Fontaine) Knowlton. Types.
3346. Potomac (Low. Cret.). Fredericksburg; and near tele-
3325. graph station, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium fredericksburgense*.
7689. *Dryopteris? gleichenoides* Knowlton. Types.
to Esmeralda (Neocene). Esmeralda County, Nevada, 3.8
7691. kilometers northeast of Emigrant Peak.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 211, pl. 30, figs. 5-7.
3268. *Dryopteris heterophylla* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium heterophyllum*.
7615. *Dryopteris idahoensis* Knowlton. Type.
Payette (Miocene). One mile southeast of Marsh Post-
Office, Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 721, pl. 99, figs. 1, 2.
6934. *Dryopteris kennerlyi* (Newberry) Knowlton. Type.
Puget Sound (Cret.). Nanaimo, Vancouver, British Co-
lumbia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium kennerlyi*.

3829. *Dryopteris macrocarpa* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.) Bank of Dutch Gap Canal, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium macrocarpum*.
3329. *Dryopteris microcarpa* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.). Hillside near Potomac Run, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium microcarpum*.
3147. *Dryopteris monocarpa* (Fontaine) Knowlton. Types.
7429. Kootanie (Low. Cret.). Great Falls, Montana.
7432. Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium monocarpum*.
3153. *Dryopteris montanense* (Fontaine) Knowlton. Type.
Kootanie (Low. Cret.). Great Falls, Montana.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium montanense*.
3344. *Dryopteris parvifolia* (Fontaine) Knowlton. Type.
3822. Potomac (Low. Cret.). Fredericksburg; banks of Dutch
3823. Gap Canal; fish hut above Dutch Gap Canal, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 92.
See *Aspidium parvifolium*.
24. *Dryopteris* (*Lastrea*) *polypodioides*? (Ettingshausen) Knowl-
25. ton. Supplemental type.
Laramie? (Cret.). Sand Creek, Colorado.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 93.
See *Lastrea* (*Goniopteris*) *polypodioides*? and *Goniopteris*
polypodioides.
3426. *Dryopteris virginica* (Fontaine) Knowlton. Type.
3827. Potomac (Low. Cret.) Roadside near Potomac Run; 72d
milepost, near Brooke, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 1.
See *Aspidium virginicum*.
5379. *Dryopteris virginica* (Fontaine) Knowlton. Type.
See *Aspidium virginicum*.
4389. *Dryopteris weedii* Knowlton. Types.
5135. Fort Union (Tert.). Cliff on Yellowstone River and Can-
yion above mouth of Hell Roaring Creek, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 669, pl.
80, fig. 8; pl. 81, fig. 2.

5072. *Dryopteris xantholithense* Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, Yellowstone National
Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 671, pl.
81, fig. 1.
5297. *Elæodendron polymorphum* Ward. Types.
5301. Fort Union (Tert.). Burns's Ranch, below Glendive, Moni-
5313. tana.
5372. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 84, pl. 38, figs. 1-7.
5315. *Elæodendron serrulantum* Ward. Types.
5316. Fort Union (Tert.). Burns's Ranch, below Glendive, Mon-
5371. tana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 83, pl. 37, figs. 3-5.
646. *Embothrium? daphneoides* Lesquereux. Type.
Dakota (Cret.). Western Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 87,
pl. 30, fig. 10.
3398. *Encephalartopsis nervosa* Fontaine. Types.
3793. Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 174, pl. 70, fig. 4;
pl. 71, figs. 3, 4; pl. 72, figs. 3, 4.
18236. *Equisetites gracilis* Lesquereux. Type.
Pottsville (Penn.). Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P.
Text, III, 1884, pp. 729, 730, pl. 90, fig. 5.
18250. *Equisetites occidentalis* Lesquereux. Type.
Allegheny (Penn.). Mazon Creek, Grundy County, Ill.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P.
Text, I, 1880, p. 62, pl. 3, fig. 15.
2880. *Equisetum abiquiense* Fontaine. Type.
Triassic. Copper mines near Abiquiu, New Mexico.
Fontaine (in Fontaine and Knowlton), Proc. U. S. Nat. Mus. XIII,
1890, p. 283, pl. 22, fig. 1.
5094. *Equisetum canaliculatum* Knowlton. Types.
5105. Miocene (Tert.). Specimen Ridge, opposite Junction
5223. Butte, Yancey Fossil Forest, and Yellowstone River,
one-half mile below mouth of Elk Creek, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 675,
pl. 81, figs. 6, 7.
5075. *Equisetum deciduum* Knowlton. Type.
Miocene (Tert.). Yellowstone River, one-half mile below
mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 676,
pl. 81, fig. 5.

5061. *Equisetum haguei* Knowlton. Types.
 5139. Miocene (Tert.). Southeastern end of hill north of Lost
 Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 674,
 pl. 81, figs. 3, 4.
38. *Equisetum haydenii* Lesquereux. Types.
 39. Green River (Tert.). Barrel Springs, Wyoming.
 Lesquereux, Ann. Rept. U. S. Geol. and Geog. Surv. Terr., 1871,
 [1872], p. 284; idem., 1872 [1873], p. 385; idem., 1874 [1876],
 p. 67, pl. 6, figs. 2, 3.
40. *Equisetum haydenii* Lesquereux. Illustrated specimen.
 Laramie? (Cret.). Carbon, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 67,
 pl. 6, fig. 4.
2464. *Equisetum hornii* Lesquereux. Type.
 Eocene (Tert.). Cherry Creek, Wasco County, Oregon.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 23.
 = *Equisetum oregonense*.
2281. *Equisetum knowltoni* Fontaine. Type.
 Triassic. Copper mines, Albiqniu, New Mexico.
 Fontaine (in Fontaine and Knowlton), Proc. U. S. Nat. Mus.,
 XIII, 1890, p. 283, pl. 23, figs. 3, 4.
43. *Equisetum lævigatum* Lesquereux. Type.
 Laramie (Cret.). Sand Creek, Colorado.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
 [1874], p. 395; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 68, pl. 6, fig. 6.
42. *Equisetum lævigatum* Lesquereux. Illustrated specimen.
 Laramie (Cret.) Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv., Terr., VII, Pt. II, 1878, p. 68,
 pl. 6, fig. 6.
41. *Equisetum lesquereuxii* Knowlton. Type.
 Miocene? (Tert.). Near Yellowstone Lake, Yellowstone
 National Park.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 94.
 See *Equisetum limosum*?
41. *Equisetum limosum*? Linnæus. Illustrated specimen.
 Miocene? (Tert.). Near Yellowstone Lake, Yellowstone
 National Park.
 Lesquereux, Ann. Rept. U. S. Geol. Surv., 1871 [1872], p. 299;
 Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 69, pl. 6, fig. 5.
 = *Equisetum lesquereuxii*.
3245. *Equisetum lyelli* Mantell. Illustrated specimen.
 Potomac (Low. Cret.). Fredericksburg; fishing hut above
 Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 65, pl. 1, fig. 7;
 pl. 2, figs. 4, 5.

3280. *Equisetum marylandicum* Fontaine. Type.
Potomac (Low. Cret.). Belt and Covington streets, Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 65, pl. 2, fig. 10.
7099. *Equisetum oregonense* Newberry. Type.
Upper Eocene? (Tert.). McBees Canyon (Currant Creek?), Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 503; Mon. XXXV, U. S. Geol. Surv., 1898, p. 14, pl. 65, fig. 7.
2464. *Equisetum oregonense* Newberry. Supplemental type.
Eocene (Tert.). Cherry Creek, Wasco County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 22.
See *Equisetum hornii*.
3479. *Equisetum rogersi* Schimper. Illustrated specimen.
Triassic. Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 10, pl. 1, fig. 2; pl. 2, figs. 1, 2.
3734. *Equisetum texense* Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 263, pl. 36, fig. 1.
3274. *Equisetum virginicum* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 63, 64, pl. 1, figs. 1-6, 8; pl. 2, figs. 1-3, 6, 7, 9.
7387. *Equisetum virginicum* Fontaine. Illustrated specimen.
Lakota (Low. Cret.). North side Pine Creek near Mrs. Dorsett's ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 650, pl. 160, fig. 1.
7045. *Equisetum wyomingense* Lesquereux. Illustrated specimen.
Green River (Tert.). Green River, Sweetwater County, Wyoming.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 15, pl. 65, fig. 8.
8503. *Equisetum* sp. Knowlton.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 23, pl. 1, fig. 1.
6903. *Eremophyllum fimbriatum* Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 107, pl. 8, fig. 1.
See *Ficus?* *fimbriata*.
- 5699 to 5701. *Eremopteris bilobata* David White. Types.
Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry County, Missouri.
6036. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 19, pl. 4; pl. 5, figs. 4-6.

15009. **Eremopteris cheathamii** Lesquereux. Types.
 15025 Pottsville (Penn.). Privett's coal bank, Washington
 to County, Arkansas, and Tracy, Tennessee.
 15027. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 770, pl. 104, figs. 2-4.
30853. **Eremopteris missouriensis** Lesquereux. Type.
 Cherokee, Des Moines (Penn.). Near Clinton, Henry
 County, Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 53, figs. 8, 8a; Text, I, 1880, p. 295.
5670. **Eremopteris missouriensis** Lesquereux. Illustrated specimen.
 Cherokee, Des Moines (Penn.). Hobb's Coal Mine, Henry
 County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 16, pl. 5, fig. 1.
5657. **Eremopteris missouriensis** Lesquereux. Illustrated specimen.
 5659. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
 5681. County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 16, pl. 5, figs. 2,
 3; pl. 6, fig. 1.
14213. **Eremopteris solida** (Lesquereux) David White. Types.
 14214. Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
 nois.
 White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 88.
 See *Sphenopteris solida*.
137. **Eriocaulon? porosum** Lesquereux. Type.
 Laramie? (Cret.). Sand Creek, Colorado.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
 [1874], p. 396; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 106, pl. 16, fig. 2.
3273. **Eucalyptophyllum oblongifolium** Fontaine. Type.
 Potomac (Low. Cret.). 72d mile post, near Brooke, Vir-
 ginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 325, pl. 162, fig. 4.
489. **Eucalyptus? americana** Lesquereux. Type.
 Green River (Tert.). Green River Station, Wyoming.
 Lesquereux, Suppl. Ann. Rept. U. S. Geol. and Geogr. Surv. Terr.,
 1871 [1872], p. 7; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr.,
 1874, p. 296, pl. 59, figs. 11, 12.
3082. **Eucalyptus dakotensis** Lesquereux. Type.
 Dakota (Cret.). Ellsworth County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 137, pl. 37.
488. **Eucalyptus hærिंगiana? Ettingshausen.**
 Illustrated specimen.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 296,
 pl. 59, fig. 10.

2693. *Eugenia primæva* Lesquereux. Types.
 2762. Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 137, pl. 53,
 figs. 6-8.
1585. *Euonymus flexifolius* Lesquereux. Type.
 Green River (Tert.). Uinta County, Wyoming, northeast
 of Randolph, Utah.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 183,
 pl. 38, fig. 13.
5304. *Euonymus xantholithensis* Ward. Types.
 5305. Fort Union (Tert.). Burns's Ranch, below Glendive, Mon-
 tana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 82, pl. 37, figs. 1, 2.
620. *Fagus cretacea* Newberry. Type.
 Dakota (Cret.). Smoky Hill, Kansas.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 23; U. S. Geol.
 Surv., Ills. Cret. and Tert. Plants, 1878, pl. 2, fig. 3; Mon.
 XXXV, U. S. Geol. Surv., 1898, p. 68, pl. 2, fig. 3.
164. *Fagus feroniæ* Unger. Illustrated specimens.
 165. Green River (Tert.). Elko, Nevada.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 146,
 pl. 19, figs. 2, 3.
8563. *Fagus ferruginea* Aiton. Type.
 Interglacial (Pleistocene). Morgantown, West Virginia.
 Knowlton in I. C. White, Amer. Geol., XVIII, 1896, p. 371.
50020. *Fagus orbiculatum* Lesquereux. Type.
 Dakota (Cret.). Ellsworth County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 51, pl. 47, fig. 6.
619. *Fagus polyclada* Lesquereux. Type.
 Dakota (Cret.). Decatur, Nebraska.
 Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 95; Rept. U. S.
 Geol. Surv. Terr., VIII, Pt. III, 1883, p. 67, pl. 5, fig. 6.
5126. *Fagus undulata* Knowlton. Types.
 5138. Fort Union (Tert.). Bluff on Yellowstone River, one mile
 5185. above mouth of Elk Creek, and Fossil Forest beds,
 Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 700,
 pl. 85, figs. 4, 5.
3456. *Feildeniopsis crassinervis* Fontaine. Type.
 3795. Potomac (Low. Cret.). Kankeys, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 205, pl. 85, fig. 5.
7377. *Feistmantelia oblonga* Ward. Type.
 Lakota (Low. Cret.). Cliff north side of Pine Creek, west
 of Mrs. Dorsett's ranch, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 693, pl. 169, fig. 19.

3271. **Ficophyllum crassinerve** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; Deep Bottom;
fishing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 291, 292, pl. 144
fig. 3; pl. 145, fig. 3; pl. 146, fig. 1; pl. 147, fig. 4; pl. 148, figs.
1, 2, 4; pl. 157, fig. 4; pl. 173, fig. 10.
3393. **Ficophyllum eucalyptoides** Fontaine. Type.
3919. Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 294, pl. 164, figs. 1, 2.
3188. **Ficophyllum serratum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 294, pl. 145, fig. 2.
pl. 149, fig. 9.
7367. **Ficophyllum serratum** Fontaine. Illustrated specimen.
Lakota (Low. Cret.). Cliff east bank Oak Creek, two miles
below Robbins's ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p.
689, pl. 169, fig. 8.
3229. **Ficophyllum tenuinerve** Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run; Fred-
ericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 292, 293, pl. 140,
fig. 3; pl. 141, fig. 2; pl. 145, figs. 1, 4; pl. 147, fig. 2; pl. 149,
figs. 1, 3, 5; pl. 156, fig. 1.
7105. **Ficus? alaskana** Newberry. Types.
7106. Eocene (Tert.). Cook Inlet, Alaska.
7111. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 512; Mon. XXXV, U. S.
7112. Geol. Surv., 1898, p. 84, pl. 51, fig. 1; pl. 52, fig. 1; pl. 55,
figs. 1, 2.
50054. **Ficus aligera** Lesquereux. Types.
to Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
50056. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 84, pl. 10,
50128. figs. 3, 6.
1601. **Ficus alkalina** Lesquereux. Types.
1602. Green River (Tert.). Alkali Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
164, pl. 44, figs. 7, 9.
7599. **Ficus? applegatei** Knowlton. Type.
Miocene (Tert.). Three miles southeast of Ashland,
Oregon.
Knowlton, Proc. Biol. Soc. Wash., XV, 1902, p. 86.
See *Ficus? hesperia*.
258. **Ficus arenacea** Lesquereux. Types.
260a. Laramie? (Cret.). Locality uncertain.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872],
p. 300; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 195,
pl. 29, figs. 1, 3, 4.
= *Ficus lanceolata* (part).

259. **Ficus arenacea brevipetiolata** Lesquereux. Types.
 261. Laramie? (Cret.). Locality uncertain.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 195,
 pl. 29, figs. 2-5.
 See *Ficus gaudini*.
290. **Ficus asarifolia** Ettingshausen. Illustrated specimens.
 to Montana (Cret.). Point of Rocks, Wyoming.
 292. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 207,
 546. pl. 61, figs. 18-21.
 547.
266. **Ficus auriculata** Lesquereux. Illustrated specimens.
 266a. Laramie (Cret.). Golden, Colorado.
 267. Lesquereux, Rept., U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 206,
 pl. 30, figs. 4-6.
268. **Ficus auriculata** Lesquereux. See *Ficus subtruncata*.
 269.
 270.
802. **Ficus clintoni** Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 393.
 = *Ficus planicostata clintoni*.
7085. **Ficus? condoni** Newberry. Type.
 Upper Eocene (Tert.). Bridge Creek, Crook County,
 Oregon.
 Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 512; Mon. XXXV,
 U. S. Geol. Surv., 1898, p. 85, pl. 57, fig. 1.
4106. **Ficus crossii** Ward. Type.
 Laramie (Cret.). Golden, Colorado.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 39, pl. 21, fig. 2.
6938. **Ficus? cuneatus** Newberry. Type.
 Puget Sound (Cret.). Point Doughty, Orcas Island,
 Washington.
 Newberry, Boston Journ. Nat. Hist., VII, 1863, p. 524.
 = *Nyssa? cuneata*.
293. **Ficus dalmatica** Ettingshausen. Illustrated specimens.
 294. Montana (Cret.). Point of Rocks, Wyoming.
 581a. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, 199,
 pl. 63, figs. 3-5.
4377. **Ficus deformata** Knowlton. Type.
 Fort Union (Tert.). Yellowstone River, one-half mile
 below mouth of Elk Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 712,
 pl. 91, fig. 2.

4331. **Ficus densifolia** Knowlton. Types.
 4400. Fort Union (Tert.). Foot of bluff, Yellowstone River,
 4410. one-half mile below mouth of Elk Creek, hill north of
 4489. Lost Creek, and southeast side Crescent Hill, Yellowstone
 National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 714, pl.
 89, fig. 1; pl. 90, figs. 1, 2; pl. 91, fig. 1.
743. **Ficus distorta** Lesquereux. Type.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
 p. 393; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 342, pl. 5, fig. 5; Rept. U. S. Geol. Surv. Terr., VIII,
 Pt. III, 1883, p. 48, pl. 14, fig. 4.
6903. **Ficus? fimbriata** Lesquereux. Type.
 Dakota (Cret.). Decatur, Nebraska.
 Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 96.
 = *Eremophyllum fimbriatum*.
3432. **Ficus fredericksburgensis** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 295, pl. 148, figs. 3, 5.
259. **Ficus gaudini** Lesquereux. Types.
 261. Laramie? (Cret.). Locality uncertain.
 Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 300.
 = *Ficus arenacea brevipetiolata*.
4493. **Ficus haguei** Knowlton. Type.
 Miocene (Tert.). Middle stratum Fossil Forest Ridge,
 Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 715, pl.
 90, fig. 3.
263. **Ficus haydenii** Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 394; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 197,
 pl. 30, fig. 1.
7649. **Ficus hesperia** Knowlton. Type.
 Montana (Cret.). North Fork Dutton Creek, Albany
 County, Wyoming.
 Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 45, pl. 9, fig. 5.
7599. **Ficus? hesperia** Knowlton. Illustrated specimen.
 Miocene (Tert.). Three miles southeast of Ashland, Oregon.
 Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
 p. 45, pl. 2, fig. 4.
 = *Ficus? applegatei*.
771. **Ficus inaequalis** Lesquereux. Type.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 82, pl. 50, fig. 3.

295. **Ficus irregularis** Lesquereux. Illustrated specimens.
 296. Montana (Cret.). Point of Rocks, Wyoming.
 297. Denver (Cret.). Golden, Colorado.
 831. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 196,
 pl. 34, figs. 4-7.
 See *Ulmus?* *irregularis*.
4104. **Ficus irregularis** Lesquereux. Illustrated specimen.
 4105. Denver (Cret.). Golden, Colorado.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 38, pl. 20, figs. 4, 5.
255. **Ficus jynx** Unger. Illustrated specimen.
 Green River (Tert.). Elko Station, Nevada.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 193,
 pl. 28, fig. 6.
2706. **Ficus krausiana** Heer. Illustrated specimen.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 81, pl. 50, fig. 5.
7684. **Ficus lacustris** Knowlton. Type.
 Esmeralda (Neocene). 4.5 kilometers northeast of Emi-
 grant Peak, Esmeralda County, Nevada.
 Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
 p. 215, pl. 30, fig. 26.
252. **Ficus lanceolata** Heer. Illustrated specimen.
 253. Green River (Tert.). Green River Station, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 192,
 pl. 28, figs. 1-3.
- 260a. **Ficus lanceolata** Heer. Illustrated specimen.
 Laramie? (Cret.). Locality uncertain.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1871,
 [1872], p. 300; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 195, pl. 29, fig. 2.
 See *Ficus arenacea* (part).
50129. **Ficus lanceolata acuminata** Ettingshausen. Illustrated specimen.
 Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 85, pl. 13, fig. 4.
278. **Ficus latifolia** (Lesquereux) Knowlton. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 102.
 See *Ficus planicostata latifolia*.
634. **Ficus laurophylla** Lesquereux. Types.
 635. Dakota (Cret.). Fort Harker, Kansas.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 342, pl. 5, fig. 7, Rept. U. S. Geol. Surv. Terr., VIII,
 Pt. III, 1883, p. 49, pl. 1, figs. 12, 13.
 = *Ficus reticulata*.
 See *Laurophyllum reticulatum*.

4108. **Ficus limpida** Ward. Type.
Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 42, pl. 22, fig. 3.
7101. **Ficus membranacea** Newberry. Type.
Eocene (Tert.). Cook Inlet, Alaska.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 512; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 87, pl. 59, fig. 2.
2638. **Ficus multinervis** Heer. Illustrated specimen.
Upper Tertiary. Boaz Station, Graves County, Kentucky.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 11, pl. 4, figs. 2, 3.
256. **Ficus oblancoolata** Lesquereux. Types.
257. Laramie? (Cret.). Carbon Station, Wyoming.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 387; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 194,
pl. 28, figs. 9, 11, 12.
281. **Ficus occidentalis** Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 200,
pl. 32, fig. 4.
8543. **Ficus? oregoniana** Lesquereux. Type.
(2475) Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 18, pl. 9, fig. 3.—
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 56, pl. 10,
fig. 3.
264. **Ficus ovalis** Lesquereux. Type.
Denver? (Cret.). Plum Creek, Pleasant Park, Colorado.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
p. 387; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 313; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, p. 198,
pl. 30, fig. 2.
7084. **Ficus planicostata** Lesquereux. Illustrated specimen.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 88, pl. 46, fig. 1.
271. **Ficus planicostata** Lesquereux. Illustrated specimens.
to Laramie (Cret.). Black Buttes, Wyoming.
277. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 201,
279. pl. 31, figs. 1-3, 10, 11.
280.
7666. **Ficus planicostata** Lesquereux. Illustrated specimen.
Montana (Cret.). Dunn's Ranch, near Harper, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 52, pl. 10, fig. 4.
285. **Ficus planicostata clintoni** (Lesquereux) Knowlton. Types.
802. Laramie (Cret.). Black Buttes, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 103.
See *Ficus planicostata goldiana* and *Ficus clintoni*.

285. **Ficus planicostata goldiana** Lesquereux. Type.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv., VII, Pt. II, 1878, p. 202, pl. 33,
 fig. 2.
 = *Ficus planicostata clintoni*.
278. **Ficus planicostata latifolia** Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 202,
 pl. 31, fig. 9.
 = *Ficus latifolia*.
50130. **Ficus præcursor** Lesquereux. Type.
 Dakota (Cret.). Ellsworth County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 81, pl. 49, fig. 5.
287. **Ficus pseudopopulus** Lesquereux. Types.
 288. Laramie? (Cret.). Evanston, Wyoming.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 313; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 204, pl. 34, figs. 1, 2.
634. **Ficus reticulata** (Lesquereux) Knowlton. Types.
 635. Dakota (Cret.). Fort Harker, Kansas.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 104.
 See *Laurophyllum reticulatum* and *Ficus laurophylla*.
6915. **Ficus reticulata** (Lesquereux) Knowlton. Illustrated specimens.
 6918. Dakota (Cret.). Fort Harker, Kansas.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 88, pl. 12,
 figs. 2, 3.
644. **Ficus? rhomboidea** Lesquereux. Type.
 Dakota (Cret.). Near Decatur, Nebraska.
 Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 96.
 = *Phyllites rhomboideus*.
2478. **Ficus shastensis** Lesquereux. Type.
 Miocene (Tert.). Shasta County, California.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 28, pl. 11, fig. 3.
4107. **Ficus sinuosa** Ward. Type.
 Denver (Cret.). Golden, Colorado.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 41, pl. 22, fig. 2.
- 106a. **Ficus? smithsoniana** Lesquereux. Type.
 Laramie (Cret.). Raton Mountains, New Mexico.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 200,
 pl. 32, fig. 5.
 See *Juglans smithsoniana*.
4109. **Ficus speciosissima** Ward. Type.
 Montana (Cret.). Point of Rocks, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 39, pl. 21, fig. 3.

- 285a. *Ficus spectabilis* Lesquereux. Illustrated specimens.
 286. Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 199,
 pl. 33, figs. 5, 6.
5347. *Ficus spectabilis* Lesquereux. Illustrated specimen.
 Denver? (Cret.). Near Golden, Colorado.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 38, pl. 21, fig. 1.
268. *Ficus subtruncata* Lesquereux. Illustrated specimens.
 269. Denver (Cret.). Golden, Colorado.
 270. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p.
 205, pl. 30, figs. 7-9.
 = *Ficus auriculata*.
1604. *Ficus tenuinervis* Lesquereux. Type.
 Green River (Tert.). Alkali Station, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 164,
 pl. 44, fig. 4.
4099. *Ficus tiliæfolia* (Al. Braun) Heer. Illustrated specimen.
 Fort Union (Tert.). Burns's Ranch, below Glendive,
 Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 40, pl. 22, fig. 1.
282. *Ficus tiliæfolia* (Al. Braun) Heer. Illustrated specimen.
 283. Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, 203,
 pl. 32, figs. 2, 3.
5353. *Ficus trinervis* Knowlton. Types.
 5354. Montana (Cret.). Point of Rocks and Black Buttes, Wy-
 oming.
 Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 42.
 See *Cinnamomum affine*.
298. *Ficus ulmifolia* Lesquereux. Types.
 to Laramie (Cret.). Fischer's Peak, Raton Mountains, New
 300. Mexico.
 Lesquereux, Suppl. to Fifth Ann. Rept. U. S. Geol. Surv. Terr.,
 1871 [1872], p. 14.
 = *Ficus uncata*.
298. *Ficus uncata* Lesquereux. Types.
 to Laramie (Cret.). Fischer's Peak, Raton Mountains, New
 300. Mexico.
 Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 197, pl. 35, figs. 1, 1a, 2.
 See *Ficus ulmifolia*.
265. *Ficus ungeri* Lesquereux. Type.
 Green River (Tert.). Green River Station, Wyoming.
 Lesquereux, Suppl. Ann. Rept. U. S. Geol. and Geogr. Surv. Terr.,
 1871 [1872], p. 7; Rept. U. S. Geol. Surv. Terr., 1874, p. 195.

- 1598 **Ficus ungeri** Lesquereux. Illustrated specimens.
to Green River (Tert.). Alkali Station, Wyoming.
1600. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 163, pl. 44, figs. 1-3.
4405. **Ficus ungeri** Lesquereux. Illustrated specimen.
Fort Union (Tert.). Bluff on Yellowstone, one mile below
mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 713, pl. 91,
fig. 3.
7627. **Ficus ungeri** Lesquereux. Illustrated specimen.
Payette (Miocene). Cartwright's Ranch, on Shafer Creek,
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 731, pl. 101, fig. 5.
- 4100 **Ficus viburnifolia** Ward. Types.
to Fort Union (Tert.). Clear Creek, fifteen miles above
4103. Glendive, Montana.
4153. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 42, pl. 22, figs. 4-8.
3280. **Ficus virginiensis** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 295, pl. 143, figs.
1, 3; pl. 144, fig. 1.
289. **Ficus wyomingiana** Lesquereux. Type.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 205,
pl. 34, fig. 3.
7583. **Ficus** sp. Knowlton.
Miocene (Tert.). Comstock, Douglas County, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 46, pl. 4, fig. 2.
7593. **Ficus** sp.? Knowlton.
Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 46, pl. 3, fig. 1.
4398. **Ficus** sp. Knowlton.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 713, pl.
89, fig. 3.
50036. **Ficus** sp. Lesquereux (fruits of).
50037. Dakota (Cret.). Four miles south of Brookville, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 85, pl. 10,
figs. 7, 8.
- 110 **Flabellaria eocenica** Lesquereux. Illustrated specimens.
to Laramie (Cret.). Black Buttes, Wyoming.
112. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 111,
pl. 13, figs. 1, 2, 3.

1570. **Flabellaria florissanti** Lesquereux. Types.
 1571. Green River (Tert.). Uinta County, Wyoming, northeast
 of Randolph, Utah.
 Lesquereux, Rept. U. S. Geol. Surv. Terr. VIII, Pt. III, 1883, p. 144,
 pl. 24, fig. 1.
601. **Flabellaria? minima** Lesquereux. Type.
 Dakota (Cret.). Western Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 56, pl. 30,
 figs. 12, 12a.
101. **Flabellaria zinkeni?** Heer. Illustrated specimens.
 102. Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 110,
 pl. 60, figs. 6-8.
 = *Geonmites goldianus*.
1796. **Fraxinus abbreviata** Lesquereux. Type.
 Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 170,
 pl. 28, fig. 5.
7125. **Fraxinus affinis** Newberry. Type.
 Upper Eocene (Tert.). Bridge Creek, Crook County,
 Oregon.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 127, pl. 49,
 fig. 5.
 = *Quercus affinis*.
333. **Fraxinus denticulata** Heer. Illustrated specimen.
 Livingstone (Cret.). Spring Canyon, near Fort Ellis,
 Montana.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 228,
 pl. 40, fig. 2.
1793. **Fraxinus heerii** Lesquereux. Types.
 1794. Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
 169, pl. 33, figs. 5, 6.
3763. **Fraxinus herendeenensis** Knowlton. Type.
 Eocene (Tert.). Herendeen Bay, Alaska.
 Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 224, pl. 9, fig. 7.
7062. **Fraxinus integrifolia** Newberry. Types.
 7090. Upper Eocene (Tert.). Bridge Creek, Crook County,
 Oregon.
 Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 509; Mon. XXXV,
 U. S. Geol. Surv., 1898, p. 128, pl. 49, figs. 2, 3.
1795. **Fraxinus libbeyi** Lesquereux. Type.
 Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 171,
 pl. 27, fig. 7.

- 1784 **Fraxinus mespilifolia** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1791. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 169, pl. 33, figs. 7-9, 11, 12.
334. **Fraxinus prædicta** Heer. Illustrated specimen.
Green River (Tert.). South Park, near Costello's Ranch, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 414; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 279, pl. 40, fig. 3.
4358. **Fraxinus wrightii** Knowlton. Type.
Fort Union (Tert.). Yellowstone River, below Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 743, pl. 90, fig. 4.
3750. **Frenelopsis hoheneggeri** (Ettingshausen) Schenk. Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 275, pl. 43, fig. 4.
3228. **Frenelopsis parceramosa** Fontaine. Type.
Potomac (Low. Cret.). Entrance to Trent's reach, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 218, 219, pl. 111, figs. 1-5; pl. 112, figs. 1-5; pl. 98, fig. 1.
3187. **Frenelopsis ramossissima** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 215-218, pls. 95-99; pl. 100, figs. 1-3; pl. 101, fig. 1.
3749. **Frenelopsis varians** Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 273, pl. 41, figs. 1-3a.
3158. **Fucus lignitum** Lesquereux. Illustrated specimen.
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 42, pl. 61, figs. 24, 24a.
4219. **Fucus lignitum** Lesquereux. Illustrated specimen.
Montana (Cret.). Point of Rocks, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 13, pl. 1, fig. 1.
4220. **Fucus lignitum** Lesquereux. Illustrated specimen.
Fort Union (Tert.). Burns's Ranch, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 13, pl. 1, fig. 2.
- 75 **Geinitzia biformis** (Lesquereux) Knowlton. Types.
to Montana (Cret.). Point of Rocks, Wyoming.
78. Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 28.
See *Sequoia biformis*. (Also catalogue numbers 4226, 5368, 5369.)

7662. **Geinitzia formosa** Heer. Illustrated specimens.
7663. Montana (Cret.). Near Harper's Station, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 28, pl. 5,
figs. 1, 2.
7375. **Geinitzia jenneyi** Fontaine. Types.
7392. Lakota (Low. Cret.). Cliff north side Pine Creek, two miles
7393. west of Mrs. Dorsett's ranch, Crook County, Wyoming.
7394. Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 676, pl. 166, figs. 5-11; pl. 167.
61. **Geinitzia longifolia** (Lesquereux) Knowlton. Types.
73. Montana and Laramie? (Cret.). Greeley, Colorado, and
74. Point of Rocks, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 28.
See *Sequoia longifolia*.
103. **Geonomites goldianus** Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 115,
pl. 9, fig. 9.
101. **Geonomites goldianus** Lesquereux. See *Flabellaria zinkenii*?
102.
104. **Geonomites schimperi** Lesquereux. Type.
Laramie? (Cret.). Yellowstone Lake, Yellowstone National
Park.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 116,
pl. 10, fig. 10.
105. **Geonomites tenuirachis** Lesquereux. Type.
Laramie (Cret.). Raton Mountains, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 117,
pl. 11, fig. 1.
106. **Geonomites ungeri** Lesquereux. Type.
Laramie (Cret.). Raton Mountains, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 118,
pl. 11, fig. 2.
30794. **Gilbertina spiralis** Ulrich. Types.
30795. Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 141, pl. 18, figs. 1, 2.
4222. **Ginkgo adiantoides** (Unger) Heer. Illustrated specimens.
4223. Fort Union (Tert.). Seven Mile Creek, ten miles below
Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 15, pl. 1, figs. 5, 6.
8398. **Ginkgo digitata** (Brongniart) Heer. Illustrated specimen.
8406. Jurassic? Corwin coal mine, near Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 170,
pl. 44, figs. 5, 6.

8388. **Ginkgo huttoni** (Sternberg) Heer. Illustrated specimen.
(2482.) Neocomian or Jurassic. Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 170.
See *Ginkgo multinervis*.
8407. **Ginkgo huttoni magnifolia** Fontaine. Types.
8412. Jurassic? Corwin Creek, east of Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 170;
pl. 44, figs. 7, 8.
4221. **Ginkgo laramiensis** Ward. Type.
Montana (Cret.). Point of Rocks, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 15, pl. 1, fig. 4.
8388. **Ginkgo multinervis** Heer. Illustrated specimen.
(2482.) Neocomian or Jurassic. Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 31, pl. 16, fig. 6.
=*Ginkgo huttoni*.
498. **Ginkgo** sp. Knowlton.
499. Laramie (Cret.). Black Buttes, Wyoming.
499a. Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 111.
See *Carpites myricarum*.
8536. **Ginkgo** sp. Knowlton.
Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 23, pl. 1, fig. 5.
8418. **Ginkgodium? alaskense** Fontaine. Types.
8387. Jurassic? Cape Lisburne, Alaska.
(2437.) Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 168,
pl. 44, figs. 3, 4.
See *Baiera palmata*.
2193. **Gleichenia? gilbert-thompsoni** Fontaine. Type.
Shasta (Low. Cret.). Pettyjohn's Ranch, twelve miles west
of Red Bluff, Tehama County, California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 232,
pl. 66, fig. 11.
584. **Gleichenia kurriana** Heer. Illustrated specimen.
Dakota (Cret.). Three miles east of Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 47,
pl. 1, fig. 5.
585. **Gleichenia nordenskiöldi** Heer. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., I, 1874
[1876], p. 334, pl. 2, fig. 5; Rept. U. S. Geol. Surv. Terr., VIII,
Pt. III, 1883, p. 26, pl. 1, fig. 1.
3186. **Gleichenia nordenskiöldi?** Heer. Illustrated specimen.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 119, pl. 21, fig. 11.

3992. **Gleichenia nordenskiöldi?** Heer. Illustrated specimen.
 3997. Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 231, pl. 65, figs. 26, 27.
 See *Aspidium heterophyllum*.
4002. **Gleichenia nordenskiöldi?** Heer. Illustrated specimen.
 Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 231, pl. 65, fig. 28.
 See *Pecopteris strictinervis*.
31587. **Gleichenia nordenskiöldi?** Heer. Illustrated specimen.
 (4004.) Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 231, pl. 65, fig. 29.
 See *Osmunda dicksonoides*.
- 7686 **Gleichenia? obscura** Knowlton. Types.
 to Esmeralda (Neocene). 3.8 kilometers northeast of Emigrant Peak, Esmeralda County, Nevada.
 7688.
 7693. Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 210, pl. 30, figs. 1-4.
6008. **Gleichenia zippei?** (Corda) Heer. Illustrated specimen.
 Red Canyon, west of Minnekahta, Fall River County, South Dakota.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 664, pl. 162, fig. 9.
1359. **Glossopteris ampla** Dana. Type.
 Upper Coal Measures (Penn.). Newcastle, Illawarra, New South Wales, Australia.
 Dana, Wilkes, U. S. Expl. Exped., X, 1849, p. 717; Atlas, p. 5, pl. 13, figs. 1a, 1b.
1358. **Glossopteris browniana** Brongniart. Illustrated specimens.
 Upper Coal Measures (Penn.). Newark and Illawarra, New South Wales, Australia.
 Dana, Wilkes, U. S. Expl. Exped., X, 1849, p. 716; Atlas, p. 5, pl. 12, figs. 13, 13a, b, c, 14.
2645. **Glossopteris phillipsii** Brongniart. Illustrated specimens.
 2649. Jurassic or Lower Cretaceous. Uinta County, Wyoming.
 Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166), 1845, p. 305, pl. 2, figs. 5, 5b.
3349. **Glossozamites distans** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 176, pl. 68, fig. 5.

6009. **Glossozamites fontaneanus** Ward. Types.
Lakota (Low. Cret.). Red Canyon, west of Minnekahta,
Fall River County, South Dakota.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 667, pl. 162, figs. 16-18.
4007. **Glossozamites klipsteini** (Dunker) Fontaine. Supplemental type.
Shasta (Low. Cret.). Near Lowrey, Tehama County, Cali-
fornia.
Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
= *Sagenopteris mantelli*.
3250. **Glyptostrobus brookense** (Fontaine) Ward. Types.
3866. Potomac (Low. Cret.). 72d milepost near Brooke, Vir-
3965. ginia.
Ward, Fifteenth Ann. Rept., U. S. Geol. Surv., 1895, p. 359.
See *Taxodium* (*Glyptostrobus*) *brookense*.
- 5933a. **Glyptostrobus brookense** (Fontaine) Ward. Illustrated specimens.
7399. Lakota (Low. Cret.). Cliff on north side Pine Creek, two
miles west of Mrs. Dorsett's ranch, Crook County,
Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 682, pl. 165, fig. 4; pl. 168, fig. 4.
3375. **Glyptostrobus brookense angustifolium** (Fontaine) Knowl-
ton. Type.
Potomac (Low. Cret.). White House Bluff, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 112.
See *Taxodium* (*Glyptostrobus*) *brookense angustifolium*.
58. **Glyptostrobus europæus** (Brongniart) Heer. Illustrated specimen.
Green River (Tert.). Near Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 74,
pl. 7, figs. 1, 2.
= *Widdringtonia linguæfolia*.
6973. **Glyptostrobus europæus** (Brongniart) Heer. Illustrated specimen.
Fort Union (Tert.). Fort Union, Buford County, North
Dakota.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 24, pl. 26, fig. 8.
6988. **Glyptostrobus europæus** (Brongniart) Heer. Illustrated specimen.
Fort Union (Tert.). Yellowstone River (Dawson County?),
Montana.
Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants,
1878, pl. 11, fig. 7; Mon. XXXV, U. S. Geol. Surv., 1898, p. 24,
pl. 26, fig. 7.

3270. **Glyptostrobus fastigiatus** (Fontaine) Ward. Types.
 3867. Potomac (Low. Cret.). 72d milepost near Brooke; hillside
 3868. near Potomac Run, Virginia.
 Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 380.
 See *Taxodium* (*Glyptostrobus*) *fastigiatum*.
595. **Glyptostrobus gracillimus** Lesquereux. Type.
 Dakota (Cret.). Mouth of Iowa Creek, near Sioux City,
 Iowa.
 Lesquereux, Amer. Journ. Sci. (2), XLVI, 1868, p. 92; Rept. U. S.
 Geol. Surv. Terr., VI, Pt. I, 1874, p. 52, pl. I, fig. II.
 = *Sequoia gracillima*.
7643. **Glyptostrobus** sp. Knowlton. Type.
 Montana (Cret.). North Fork Dutton Creek, Albany
 County, Wyoming.
 Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 31, pl. 5, fig. 4.
24. **Goniopteris polypodioides** Ettingshausen. Illustrated specimens.
 25. Laramie (Cret.). Sand Creek, Colorado.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
 [1874], p. 394.
 = *Dryopteris* (*Lastrea*) *polypodioides*?
 See *Lastrea* (*Goniopteris*) *polypodioides*?
5312. ?**Grewia celastroides** Ward. Type.
 Fort Union (Tert.). Iron Bluff, above Glendive, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 86, pl. 39, fig. 2.
5308. **Grewia crenata** (Unger) Heer. Illustrated specimen.
 Fort Union (Tert.). Bull Mountains, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 85, pl. 39, fig. 1.
7077. **Grewia crenata** (Unger) Heer. Illustrated specimen.
 7089. Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 120, pl. 18, figs.
 2, 3; pl. 46, fig. 2.
5306. **Grewia obovata** Heer. Illustrated specimen.
 5311. Fort Union (Tert.). Seven Mile Creek, below Glendive,
 Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 88, pl. 39, figs. 6, 7.
5307. ?**Grewia pealei** Ward. Types.
 5309. Fort Union (Tert.). Bull Mountains, Montana.
 5310. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 87, pl. 39, figs. 3-5.
2363. **Grewiopsis acuminata** Lesquereux. Type.
 Laramie? (Cret.). "P. Y. Station No. 49, near Messa Sta-
 tion."
 Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 44, pl. 3, figs. 12, 13;
 pl. 4, figs. 1, 2.

50127. **Grewiopsis æquidentata** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 180, pl. 58,
fig. 4.
- 409 **Grewiopsis eocenica** (Lesquereux) Knowlton. Types.
to Laramie (Cret.). Black Buttes, Wyoming.
411. Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 114.
327a. See *Grewiopsis saportana* and *Aleurites eocenica*
765.
4174. **Grewiopsis ficifolia** Ward. Type.
4175. Laramie (Cret.). Black Buttes Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 92, pl. 41, figs. 1, 2.
740. **Grewiopsis flabellata** (Lesquereux) Knowlton. See *Grew-*
741. *opsis haydenii* and *Populites flabellata*.
6917.
740. **Grewiopsis haydenii** Lesquereux. Illustrated specimens.
741. Dakota (Cret.). Fort Harker, Kansas.
6917. Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 97,
pl. 3, figs. 2, 4; pl. 24, fig. 3.
= *Grewiopsis flabellata*.
See *Populites flabellata*.
4176. **Grewiopsis platanifolia** Ward. Type.
Fort Union (Tert.). Seven Mile Creek, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 89, pl. 40, fig. 1.
- 4171 **Grewiopsis populifolia** Ward. Types.
to Fort Union (Tert.). Burns's Ranch, Montana.
4173. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 90, pl. 40, figs. 3-5.
- 409 **Grewiopsis saportana** Lesquereux. Types.
to Laramie (Cret.). Black Buttes, Wyoming.
411. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1876, p. 257,
327a. pl. 50, figs. 10-12.
765. = *Grewiopsis eocenica*.
See *Aleurites eocenica*.
348. **Grewiopsis tenuifolia** Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 258,
pl. 40, fig. 14.
4177. **Grewiopsis viburnifolia** Ward. Type.
Fort Union (Tert.). Burns's Ranch, above Glendive, Mon-
tana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 89, pl. 40, fig. 2.
2364. **Grewiopsis walcotti** Lesquereux. Type.
Cretaceous? Upper Kanab Valley, Utah.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 45, pl. 4, figs. 3, 4.

17. **Gymnogramma gardneri** Lesquereux. Type.
Arapahoe (Cret.). Sand Creek, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 58,
pl. 4, fig. 2.
See *Pteris gardneri*.
29. **Gymnogramma haydenii** Lesquereux. Type.
Laramie (Cret.). Divide between Snake River and southern
shores of Yellowstone Lake.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872],
p. 295; Ann. Rept. U. S. Geol. Surv. Terr., 1874, p. 59, pl. 5,
figs. 1-3.
= *Anemia perplexa*.
- 30791 **Gyrodendron emersoni** Ulrich. Types.
to Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
30793. Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 140, pl. 18, fig. 3;
pl. 19, figs. 1, 2.
5405. **Halserites chondriformis** Penhallow. Type.
Upper Chemung (Dev.). Lanesboro, Susquehanna County,
Pennsylvania.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 110, pl. 11, fig. 9.
= *Tæniocrada chondriformis*.
25164. **Halserites dechenianus** Goepfert. Illustrated specimen.
Erian (Dev.). Factoryville, Wyoming County, Pennsyl-
vania.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 109, pl. 10, fig. 6.
= *Tæniocrada lesquereuxi*.
5409. **Halserites dechenianus lineatus** Penhallow. Type.
Upper Chemung (Dev.). Lanesboro, Susquehanna County,
Pennsylvania.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 109, pl. 10, fig. 7.
= *Tæniocrada lesquereuxi*.
5404. **Halserites lineatus** Penhallow. Types.
25091. Upper Chemung (Dev.). Lanesboro, Susquehanna County,
and Factoryville, Wyoming County, Pennsylvania.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 110, pl. 10, fig. 8a;
pl. 11, fig. 8b.
8329. **Halserites?** sp. Penhallow.
Erian (Dev.). Skunnemunk Mountain, near Monroe,
Orange County, New Jersey.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 107, pl. 9, fig. 4.
- 15815 **Halonia flexuosa** (Goldenberg) Lesquereux. Illustrated specimens.
to Carboniferous. Seneca mine, Pittston, Pennsylvania.
15817. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 41, figs. 3, 3a; Text, II, 1880, p. 416.

15808. **Halonia mansfieldi** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 12, pl. 67, figs. 2, 2a (as *Ulodendron mansfieldi*);
Text, II, 1880, p. 414.
15811. **Halonia tortuosa** Schimper. Illustrated specimen.
Pennsylvanian. Peoria County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 61, figs. 1, 2; Text, II, 1880, p. 413.
5. **Halymenites major** Lesquereux. Type.
Laramie (Cret.). Raton Mountains, New Mexico.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 373; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 38,
pl. 1, fig. 7.
4. **Halymenites striatus** Lesquereux. Type.
Laramie (Cret.). Raton Mountains, New Mexico.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 373; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 37,
pl. 1, fig. 6.
5329. **Hamamelites fothergilloides** Saporta. Illustrated specimen.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 64, pl. 29, fig. 1.
698. **Hamamelites kansaseana** Lesquereux. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 70,
pl. 4, fig. 5.
= *Quercus kanseana*.
- 645a. **Hamamelites quadrangularis** Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 355; Rept. U. S. Geol. Surv. Terr., VIII, Pt. III,
1883, p. 70.
See *Alnites quadrangularis* and *Populites quadrangularis*.
4131. **Hedera aquamara** Ward. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 59, pl. 26, fig. 7.
= *Quercus aquamara*.
4133. **Hedera bruneri** Ward. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 58, pl. 26, fig. 6.
50101. **Hedera cretacea** Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 127, pl. 18, fig. 1.

50104. **Hedera decurrens** Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 130, pl. 18, fig. 6.
1804. **Hedera marginata** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 177, pl. 40, fig. 8.
50102. **Hedera microphylla** Lesquereux. Types.
50103. Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 127, pl. 18,
figs. 2, 3.
4132. **Hedera minima** Ward. Type.
Fort Union (Tert.). Head of Clear Creek, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 57, pl. 26, fig. 5.
682. **Hedera ovalis** Lesquereux. Types.
683. Dakota (Cret.). Near Decatur, Nebraska, and Fort Harker,
Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 91,
pl. 25, fig. 3; pl. 26, fig. 4.
4134. **Hedera parvula** Ward. Type.
Fort Union (Tert.). Clear Creek, above Glendive, Mon-
tana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 57, pl. 26, fig. 4.
685. **Hedera platanoidea** Lesquereux. Illustrated specimens.
686. Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 65, pl. 3,
figs. 5, 6.
3360. **Hederæphyllum angulatum** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 324, pl. 162, fig. 1.
3418. **Hederæphyllum crenulatum** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 324, pl. 162, fig. 3.
30798. **Helminthoida abnormis** Ulrich. Type.
Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 143, pl. 16, fig. 4.
30796. **Helminthoida exacta** Ulrich. Type.
Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 142, pl. 16, fig. 5.

30797. *Helminthoida subcrassa* Ulrich. Type.
Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 142, pl. 16, fig. 3.
30799. *Helminthoida vaga* Ulrich. Type.
Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 143, pl. 17.
30802. *Helminthopsis labyrinthica* Heer. Illustrated specimens.
30803. Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 144, pl. 20, figs. 2, 3.
30800. *Helminthopsis magna* Heer. Illustrated specimens.
30801. Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 144, pl. 21, figs. 1, 2.
567. *Hicoria antiquorum* (Newberry) Knowlton. See *Carya anti-*
568. *quorum*. (Also catalogue numbers 470-475, 5358.)
4395. *Hicoria crescentia* Knowlton. Type.
Fort Union (Tert.). Northeast side of Crescent Hill, Yel-
lowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 691,
pl. 84, fig. 7.
4344. *Hicoria culveri* Knowlton. Type.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 691,
pl. 83, fig. 7.
1870. *Hicoria juglandiformis* (Sternberg) Knowlton. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 117.
See *Carya bilinica*.
30080. *Hicoria magnifica* Knowlton. Types.
30082. Eocene (Tert.). Kukak Bay, Alaska.
30085. Knowlton, Harriman Alaska Exped., IV, 1904, p. 152, pl. 26, fig. 1;
pl. 27; pl. 29, fig. 1.
8553. *Hicoria* sp.? Knowlton.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 38, pl. 5, fig. 2.
8515. *Hydrangea bendirei* (Ward) Knowlton. Type.
(2541.) Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, pp. 60, 61, pl. 9,
fig. 6.
See *Marsilea bendirei* and *Porana bendirei*.

2744. *Hymenæa dakotana* Lesquereux. Types.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 145, pl. 55,
figs. 2, 3; pl. 56, figs. 1, 2; pl. 57, fig. 2.
3377. *Hymenæa virginensis* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 320, pl. 163, fig. 6.
19431. *Hymenophyllites strongii* Lesquereux. Type.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Rept. Geol. Surv. Ill., IV, 1870, p. 417, pl. 18, fig. 1.
= *Rhacophyllum strongii*.
14. *Hymenophyllum confusum* Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 51,
pl. 2, fig. 6.
588. *Hymenophyllum cretaceum* Lesquereux. Illustrated specimen.
Dakota (Cret.). Eight miles south of Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 45,
pl. 29, fig. 6.
37. *Hypnum haydenii* Lesquereux. Type.
Green River (Tert.). South Park, near Costello's Ranch,
Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 309; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 44, pl. 5, fig. 14.
5418. *Hysterites cordaites* Grand'Eury. Illustrated specimen.
Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 14, pl. 3.
10258. *Idiophyllum rotundifolium* Lesquereux. Type.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P.
Atlas, 1879, p. 5, pl. 23, fig. 11; Text, I, 1880, p. 160.
= *Neuropteris rarinervis*.
400. *Ilex ? affinis* Lesquereux. Types.
401. Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv., 1871 [1872], p. 8; Rept.
U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 270, pl. 1, figs. 2, 3.
403. *Ilex dissimilis* Lesquereux. Types.
to Green River (Tert.). Sage Creek, Montana.
405. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 271,
pl. 1, figs. 7-9.
See *Quercus ilicoides* (?).

1868. *Ilex grandifolia* Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 187, pl. 38, fig. 1.
1859. *Ilex knightiæfolia* Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1861. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 188, pl. 40, figs. 4, 5.
1610. *Ilex maculata* Lesquereux. Type.
Green River (Tert.). Alkali Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 186, pl. 44, fig. 5.
50077. *Ilex masoni* Lesquereux. Type.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 179, pl. 7, fig. 6.
50326. *Ilex pseudo-stenophylla* Lesquereux. Types.
to Upper Eocene (Tert.). Florissant, Colorado.
50328. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 185.
See *Ilex stenophylla*.
1862. *Ilex quercifolia* Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1867. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 186, pl. 38, figs. 2-5.
50326. *Ilex stenophylla* (Unger) Lesquereux. Supplemental types.
to Upper Eocene (Tert.). Florissant, Colorado.
50328. Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., Suppl. 1871 [1872], p. 8.
= *Ilex pseudo-stenophylla*.
744. *Ilex strangulata* Lesquereux. Type.
Montana? (Cret.). San Juan River, southwest Colorado.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876], p. 399; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874 [1876], p. 359, pl. 8, fig. 3; Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 84, pl. 3, fig. 7.
406. *Ilex subdenticulata* Lesquereux. Type.
Green River (Tert.). Near Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 416; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 271, pl. 50, fig. 6.
399. *Ilex wyomingiana* Lesquereux. Type.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 270, pl. 1, fig. 1.
2767. *Inga cretacea* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 153, pl. 55, fig. 11.

599. **Inolepis** sp. Lesquereux.
Dakota (Cret.). Clay County, Kansas.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
p. 392; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 337, pl. 4, fig. 8; Rept. U. S. Geol. Surv. Terr., VIII,
Pt. III, 1883, p. 33, pl. 1, fig. 1.
49. **Iris** sp. Newberry.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, U. S. Geol. Surv., Ills. Cret. and Tert. Plants, 1878, pl.
7, fig. 6; Mon. XXXV, U. S. Geol. Surv., 1898, p. 33, pl. 22,
fig. 6.
8429. **Irites alaskana** Lesquereux. Type.
(2320.) Neocomian or Jurassic? Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 36.
= *Nageiopsis longifolia*.
3399. **Juglandiphyllum integrifolium** Fontaine. Type.
Potomac (Low. Cret.). Deep Bottom, White House bluff,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 315, pl. 157, figs.
3, 5, 6.
50066. **Juglandites lacoiei** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 71, pl. 48, fig. 5.
50048. **Juglandites primordialis** Lesquereux. Type.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 70, pl. 35, fig. 15.
- 50029 **Juglandites sinuatus** Lesquereux. Types.
to Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
50031. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 71, pl. 35,
figs. 9-11.
30092. **Juglans acuminata** Al. Braun. Illustrated specimen.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 152, pl. 33, fig. 3.
8486. **Juglans acuminata?** Al. Braun. Illustrated specimen.
Upper Clarno, Upper Eocene (Tert.). Bridge Creek,
Crook County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 35, pl. 3, fig. 3.
- 527 **Juglans alkalina** Lesquereux. Types.
to Green River (Tert.). Alkali Station, above Green River,
529. Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 288,
pl. 62, figs. 6-8.
50032. **Juglans arctica** Heer. Illustrated specimen.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 68, pl. 39, fig. 5.

8548. *Juglans* ? *bendirei* Knowlton. Type.
Clarno beds, Eocene (Tert.). Cherry Creek, Grant
County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 34, pl. 3, fig. 3.
482. *Juglans* *crossii* Knowlton. Type.
Green River (Tert.). Green River Station, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 122.
See *Juglans denticulata*.
- 624a. *Juglans* ? *debeyana* (Heer) Lesquereux. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, Nebraska.
Lesquereux, Amer. Jour. Sci., XLVI, 1868, p. 101 (as *Juglans*
debeyana).
= *Populus* ? *debeyana*.
749. *Juglans* ? *debeyana* (Heer) Lesquereux. Illustrated specimens.
750. Dakota (Cret.). Decatur and near Beatrice, Nebraska.
6901. Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 110;
6906. pl. 23, figs. 1-5.
482. *Juglans denticulata* Heer. Illustrated specimen.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 289,
pl. 58, fig. 1.
= *Juglans crossii*.
8290. *Juglans hesperia* Knowlton. Type.
Payette (Miocene). Two miles southeast of Marsh, Boise
County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 723, pl. 99, fig. 8.
= *Juglans oregoniana*.
4325. *Juglans laurifolia* Knowlton. Types.
5127. Fort Union (Tert.). Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 688,
pl. 83, figs. 2, 3.
453. *Juglans leconteana* Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 285,
pl. 54, fig. 13.
7117. *Juglans nigella* Heer. Illustrated specimen.
Eocene (Tert.). Cooks Inlet, Alaska.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 33, pl. 51, fig. 4.
5359. ? *Juglans nigella* Heer. Illustrated specimen.
Fort Union (Tert.). Burns's Ranch, twenty-eight miles
below Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 33, pl. 15, fig. 1.

- 7027 *Juglans occidentalis* Newberry. Types.
to Green River (Tert.). Green River, Wyoming.
7033. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 507; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 34, pl. 66, figs. 1-4, 4a-c.
8290. *Juglans oregoniana* Lesquereux. Illustrated specimen.
Payette (Miocene). Two miles southeast of Marsh, Boise
County, Idaho.
Knowlton, Bull. No. 204, U. S. Geo. Surv., 1902, p. 37.
See *Juglans hesperia*.
33654. *Juglans oregoniana* Lesquereux. Supplemental type.
(2582.) Mascall beds, Miocene (Tert.). Van Horn's Ranch, Grant
County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 37.
See *Rhus bendirei* (part).
4325. *Juglans remotidens* Knowlton. Types.
4488. Miocene (Tert.). Hill above Yancey's, Yellowstone Na-
tional Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 688, pl.
83, figs. 2, 3.
- 316a. *Juglans rhamnoides* Lesquereux. Type.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 294.
449. *Juglans rhamnoides* Lesquereux. Illustrated specimens.
451. Laramie (Cret.). Black Buttes, Wyoming.
452. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 284,
pl. 54, figs. 6-9.
450. *Juglans rhamnoides* Lesquereux. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 124.
See *Rhamnus rossmässleri*.
454. *Juglans rugosa* Lesquereux. Types.
to Laramie (Cret.). Black Buttes, Wyoming.
461. Montana (Cret.). Point of Rocks, Wyoming.
463. Laramie? (Cret.). Evanston, Wyoming.
851. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 286,
pl. 54, fig. 14; pl. 55, figs. 2-9; pl. 56, figs. 1, 2.
- 361a. *Juglans schimperi* Lesquereux. Types.
465. Green River (Tert.). Green River Station, Wyoming.
to Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., Suppl., 1871
469. [1872], p. 8; Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872
[1873], pp. 382, 384; Rept. U. S. Geol. Surv. Terr., VII, Pt. II,
1878, p. 287, pl. 56, figs. 5-10.
- 106a. *Juglans smithsoniana* Lesquereux. Type.
Laramie (Cret.) Raton Mountains, New Mexico.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., Suppl., 1871 [1872],
p. 16.
= *Ficus?* *smithsoniana*.

464. **Juglans thermalis** Lesquereux. Type.
Denver (Cret.). Hot Springs, Middle Park, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., Suppl., 1871 [1872],
p. 17; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 287,
pl. 56, fig. 3.
- 464a. **Juglans thermalis** Lesquereux. Illustrated specimen.
Denver (Cret.). Hot Springs, Middle Park, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 287, pl. 56, fig. 4.
5360. ?**Juglans ungeri** Heer. Illustrated specimen.
Fort Union (Tert.). Burns's Ranch, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 33, pl. 14, fig. 6.
7589. **Juglans** sp. Knowlton. Type.
Miocene (Tert.). Comstock, Douglas County, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 39, pl. 1, fig. 5.
- 15800 **Knorria compacta** Lesquereux. Types.
to Pennsylvanian. Thayer, Kansas.
15802. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, pp. 839, 840.
8205. **Lacopteris lanceolata** (Goepfert) Presl. Illustrated specimen.
Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 281, pl. 38, figs. 2-4.
See Neuropteris sp. and Pecopteris sp.
3421. **Laricopsis angustifolia** Fontaine. Types.
3962. Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal;
entrance to Trent's Reach, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 233, pl. 102, figs.
9, 10; pl. 103, figs. 1, 4.
3358. **Laricopsis brevifolia** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal;
entrance to Trent's Reach, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 234, pl. 102, figs. 5, 6.
3323. **Laricopsis longifolia** Fontaine. Types.
3847. Potomac (Low. Cret.). Fredericksburg and fishing hut
above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 233, pl. 102; figs.
7, 8; pl. 103, figs. 2, 3; pl. 167, fig. 4; pl. 168, figs. 5, 6.
3744. **Laricopsis longifolia** Fontaine. Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 268, pl. 36, fig. 9.
12. **Lastrea arguta** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Amer. Journ. Sci. LXV, 1868, p. 207.
= Dryopteris arguta.

7097. **Lastrea (Goniopteris) fischeri** Heer. Illustrated specimen.
Lower Clarno, Eocene (Tert.). Currant Creek, Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 10, pl. 48, fig. 6.
See *Lastrea (Goniopteris) knightiana*.
7573. **Lastrea (Goniopteris) fischeri** Heer. Illustrated specimen.
Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 38, pl. 1, fig. 24.
26. **Lastrea (Goniopteris) goldiana** Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 56,
pl. 4, fig. 13.
See *Aspidium goldianum*.
27. **Lastrea (Goniopteris) intermedia** Lesquereux. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 56,
pl. 4, fig. 14.
7097. **Lastrea (Goniopteris) knightiana** Newberry. Type.
Lower Clarno, Eocene (Tert.). Currant Creek, Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 503.
= *Lastrea (Goniopteris) fischeri*.
24. **Lastrea (Goniopteris) polypodioides?** Ettingshausen.
25. Illustrated specimens.
Arapahoe (Cret.). Sand Creek, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 57,
pl. 4, figs. 11, 12.
= *Dryopteris (Lastrea) polypodioides*.
See *Goniopteris polypodioides*.
3655. **Laurinoxylon branneri** Knowlton. Types.
3656. Orange sand (Tert.). Bolivar Creek, Poinsett County,
and Big and Little Crow Creek, St. Francis County,
Arkansas.
Knowlton, Ann. Rept. Geol. Surv. Ark. for 1889, II, (1891), p. 256,
pl. 9, figs. 8, 9; pl. 10, figs. 1, 2; pl. 11, fig. 4.
3657. **Laurinoxylon lesquereuxiana** Knowlton. Type.
Orange sand (Tert.). Near Wittsburg, Cross County,
Arkansas.
Knowlton, Ann. Rept. Geol. Surv. Ark. for 1889, II, (1891), p. 258,
pl. 10, figs. 3, 4; pl. 11, figs. 3, 4.
50136. **Laurophyllum ellsworthianum** Lesquereux. Illustrated specimen.
Dakota (Cret.) Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 95, pl. 13, fig. 7.
= *Quercus ellsworthianus*.

634. **Laurophyllum reticulatum** Lesquereux. Type.
635. Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 76,
pl. 15, figs. 4, 5.
= *Ficus reticulata*.
See *Ficus laurophyllum*.
50144. **Laurus antecedens** Lesquereux. Type.
Dakota (Cret.). Four miles southwest of Brookville, Kan-
sas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 92, pl. 11,
fig. 3.
309. **Laurus brossiana** Lesquereux. Illustrated specimen.
Denver (Cret.). Mount Cross, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 216, pl. 36, fig. 9.
2496. **Laurus californica** Lesquereux. Illustrated specimen.
Miocene (Tert.). Boaz Station, Graves County, Kentucky.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 12, pl. 4, fig. 1.
4384. **Laurus grandis** Lesquereux. Illustrated specimens.
5176. Fort Union (Tert.). Specimen Ridge, Fossil Forest, Yel-
lowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 725,
pl. 93, fig. 3; pl. 95, fig. 1.
2713. **Laurus knowltoni** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv. 1891, p. 94, pl. 50, fig. 4.
7130. **Laurus macrocarpus** Lesquereux. Type.
Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 98; Rept. U. S. Geol.
Surv. Terr., VI, Pt. I, 1874, p. 74, pl. 10, fig. 2.
4394. **Laurus montana** Knowlton. Type.
5186. Fort Union (Tert.). Yellowstone River, half mile below
mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 724, pl.
95, fig. 2.
639. **Laurus nebrascensis** Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 98; Rept. U. S. Geol.
Surv. Terr., VI, Pt. I, 1874, p. 74, pl. 28, fig. 14.
See *Persea nebrascensis*.
905. **Laurus ocoteoides** Lesquereux. Type.
Laramie (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 215,
pl. 36, fig. 10.
= *Laurus wardiana*.

4404. **Laurus perdita** Knowlton. Types.
 4478. Miocene (Tert.). Hill above Yancey's and near standing
 5093. fossil trees, Yellowstone National Park.
 5220. Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 723,
 5222. pl. 94, figs. 1-5.
2711. **Laurus plutonia** Heer. Illustrated specimen.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 91, pl. 22, fig. 5.
50009. **Laurus plutonia** Heer. Illustrated specimens.
 50010. Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 91, pl. 13,
 figs. 5, 6.
311. **Laurus præstans** Lesquereux. Type.
 Montana (Cret.). Point of Rocks, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 215,
 pl. 63, fig. 7.
7651. **Laurus præstans** Lesquereux. Illustrated specimen.
 Montana (Cret.). Point of Rocks, Wyoming.
 Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 59, pl. 16, fig. 2.
4323. **Laurus primigenia**? Unger. Illustrated specimens.
 5069. Fort Union (Tert.). Foot of bluff, Yellowstone River,
 half a mile below mouth of Elk Creek, Yellowstone
 National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 722,
 pl. 91, figs. 4, 5.
5351. **Laurus primigenia** Unger. Illustrated specimen.
 Montana (Cret.). Point of Rocks, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 47, pl. 23, fig. 10.
5352. **Laurus primigenia** Unger. Illustrated specimen.
 Laramie? (Cret.). Carbon Station, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 47, pl. 23, fig. 8.
4324. **Laurus princeps** Heer. Illustrated specimen.
 Fort Union (Tert.). Foot of bluff, Yellowstone River,
 half a mile below mouth of Elk Creek, Yellowstone
 National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 725,
 pl. 95, fig. 3.
636. **Laurus proteæfolia** Lesquereux. Type.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
 p. 393; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 342, pl. 5, fig. 1; Rept. U. S. Geol. Surv. Terr., VIII,
 Pt. III, 1883, p. 52, pl. 3, fig. 9.
5348. **Laurus resurgens** Saporta. Illustrated specimen.
 Fort Union (Tert.). Bull Mountains, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 47, pl. 23, fig. 7.

304. **Laurus sessiliflora** Lesquereux. Type.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 407.
= *Malapoenna sessiliflora*.
See *Tetranthera sessiliflora*.
- 7584 to 7586b. **Laurus similis** Knowlton. Types.
Miocene (Tert.). Comstock, Douglas County, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 48, pl. 5, figs. 1-4.
- 306 to 308. **Laurus socialis** Lesquereux. Types.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 213,
pl. 36, figs. 1, 4.
310. **Laurus utahensis** Lesquereux. Type.
Laramie (Cret.). Bridgers Pass, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 216,
pl. 36, fig. 11.
905. **Laurus wardiana** Knowlton. Type.
Laramie (Cret.). Golden, Colorado.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 129.
See *Laurus ocoteoides*.
491. **Leguminosites? arachioides** Lesquereux. Types.
492. Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 301,
pl. 59, figs. 14, 14a.
See *Carpolithes arachioides*.
5370. **Leguminosites arachioides** Lesquereux. Illustrated specimen.
Fort Union (Tert.). Clear Creek, above Glendive, Mon-
tana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 65, pl. 29, fig. 2.
484. **Leguminosites cassioides** Lesquereux. Type.
Laramie (Cret.). Spring (Rocky) Canyon, near Fort Ellis,
Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 300,
pl. 59, fig. 4.
= *Leguminosites lesquereuxiana*.
3097. **Leguminosites convolutus** Lesquereux. Illustrated specimen.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 151, pl. 44, fig. 1.
50060. **Leguminosites coronillioides?** Heer. Illustrated specimens.
Dakota (Cret.). Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 149, pl. 13, fig. 10.

4391. **Leguminosites lamarensis** Knowlton. Type.
Miocene (Tert.). East bank Lamar River between Cache
and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 731, pl. 89,
figs. 5, 6.
484. **Leguminosites lesquereuxiana** Knowlton. Type.
Laramie (Cret.) Spring (Rocky) Canyon, near Fort Ellis,
Montana.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 131.
See *Leguminosites cassioides*.
704. **Leguminosites marcouanus** Heer. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants,
1878, pl. 5, fig. 2.
= *Phyllites obcordatus*.
50059. **Leguminosites podogonialis** Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 148, pl. 13, fig. 11.
50058. **Leguminosites truncatus** Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 150, pl. 21, fig. 7.
1628. **Lemna penicillata** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 143,
pl. 23, fig. 8.
5364. **Lemna scutata** Dawson. Illustrated specimen.
Fort Union (Tert.). Burns's Ranch, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 17, pl. 3, fig. 4.
540. **Lemna scutata** Dawson. Illustrated specimen.
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 102,
pl. 61, fig. 2.
= *Nelumbo intermedia*.
8248. **Lepacyclotes circularis** Emmons. Type.
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Emmons, Geol. Rept. Midland Counties of North Carolina, 1856,
p. 332, pl. 3, fig. 4; Amer. Geology, VI, 1857, p. 130, pl. 3, fig. 4.—
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv.,
Pt. II, 1900, p. 311, pl. 47, fig. 4.
- 8249 to 8252. **Lepacyclotes ellipticus** Emmons. Illustrated specimens
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 311, pl. 47, fig. 5; pl. 48.

25255. **Lepidocystis angularis** Lesquereux. Types.
 25256. Pennsylvanian. Port Griffith Railroad cut, Luzerne
 County, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 456, pl. 69, fig. 17.
 = *Plinthiotheca angularis*.
25165. **Lepidocystis fraxiniformis** (Goeppert) Lesquereux.
 25166. Illustrated specimens.
 Pottsville (Penn.). Near Pittston, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 13, pl. 69, figs. 22, 23; Text, II, 1880, p. 457.
6055. **Lepidocystis jenneyi** David White. Type.
 Cherokee, Des Moines (Penn.). Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 215, pl. 59, fig. 3.
25254. **Lepidocystis lineatus** Lesquereux. Type.
 Pocono (Miss.). Port Carbon, Schuylkill County, Penn-
 sylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 13, pl. 69, fig. 4; Text, II, 1880, pp. 454, 455.
6089. **Lepidocystis missouriensis** David White. Types.
 6090. Cherokee, Des Moines (Penn.). Gilkersons Ford, Henry
 County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 217, pl. 61, fig.
 1b; pl. 62, figs. b, c, d, e; pl. 63, figs. 3, 3a; pl. 73, fig. 2.
25246. **Lepidocystis obtusus** Lesquereux. Type.
 Anthracite series (Penn.). Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 13, pl. 69, figs. 6, 7; Text, II, 1880, p. 455.
25252. **Lepidocystis pectinatus** Lesquereux. Type.
 Anthracite series (Penn.). Pittston, Luzerne County,
 Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, II, 1880, p. 454, pl. 69, fig. 3.
25288. **Lepidocystis truncatus** (Lesquereux) David White. Type.
 Pottsville (Penn.). Campbells Ledge, Pittston, Luzerne
 County, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, II, 1880, p. 457, pl. 69, fig. 20.
15430. **Lepidodendron andrewsii** Lesquereux. Type.
 Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 12, pl. 64, fig. 6; Text, II, 1880, p. 389.
15482. **Lepidodendron brittsii** Lesquereux. Type.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, II, 1880, p. 368, pl. 63, figs. 1, 2.

5640. *Lepidodendron brittsii* Lesquereux. Illustrated specimens.
 6039. Cherokee, Des Moines (Penn.). Deepwater and Clinton,
 6040. Henry County, Missouri.
 6042. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 188, pl. 52, figs.
 15488. 1, 2, 3; pl. 53, fig. 1; pl. 54, figs. 1, 2.
6680. *Lepidodendron choctavense* David White. Type.
 6752. McAlester (Penn.). Railroad cut, one-half mile south of
 McAlester, Indian Territory.
 White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p.
 528, pl. 68, figs. 14, 14a.
15437. *Lepidodendron cuspidatum* Lesquereux. Type.
 Anthracite series (Penn.). Plymouth, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Serv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 12, pl. 64, fig. 7; Text, II, 1880, p. 388.
15501. *Lepidodendron cyclostigma* Lesquereux. Types.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 11, pl. 62, fig. 5; Text, II, 1880, p. 394.
 = *Omphalophloios cyclostigma*.
8794. *Lepidodendron lanceolatum* Lesquereux.
 Illustrated specimen.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 192, pl. 53, fig. 2.
15460. *Lepidodendron lanceolatum* Lesquereux.
 Illustrated specimen.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine?,
 Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 194.
 See *Lepidodendron marginatum*.
15460. *Lepidodendron marginatum* (Presl) Lesquereux.
 Illustrated specimen.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine?,
 Henry County, Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 784, pl. 107, fig. 3.
 = *Lepidodendron lanceolatum*.
15515. *Lepidodendron rigidum* Lesquereux. Types.
 to Pottsville (Penn.). Dade County, Georgia.
 15517. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 839.
6043. *Lepidodendron rimosum retocorticatum* David White.
 15280. Types.
 Cherokee, Des Moines (Penn.). Owen's Coal Mine, and
 Clinton, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 196, pl. 54,
 figs. 3, 4.

1491. *Lepidodendron scobiniforme* Meek. Type.
Pocono (Miss.). Lewis Tunnel, West Virginia.
Meek, Bull. Phil. Soc. Washington, II, 1875-1880, Appendix, p. 38,
pl. 2, figs. 1, 1a.
15448. *Lepidodendron scutatum* Lesquereux. Type.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 63, figs. 6-6c; Text, II, 1880, pp. 369, 370.
6044. *Lepidodendron scutatum* Lesquereux. Illustrated specimens.
to Cherokee, Des Moines (Penn.). Owens and Pitcher's coal
6046. mines, Henry County, Missouri.
6074. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 198, pl. 45, fig. 4;
pl. 54, fig. 5; pl. 55; pl. 72, fig. 4.
15941. *Lepidophloios dilatatus* Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
15946. Cherokee, Des Moines (Penn.). Clinton, Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 781, pl. 105, figs. 1-4.
15944 = *Lepidophloios van ingeni*.
15974. *Lepidophloios ichthyoderma* Lesquereux. Type.
Allegheny (Penn.). Morris, Grundy County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 13, pl. 68, fig. 10; Text, II, 1880, p. 426.
6047. *Lepidophloios van ingeni* David White. Types.
to Cherokee, Des Moines (Penn.). Gilkerson's Ford, Clinton,
6053. and Henry County, Missouri.
6061. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 205, pl. 56, figs.
6075. 1-8; pl. 57; pl. 58, fig. 1?; pl. 61, fig. 1c; pl. 62, fig. f; pl. 63,
6092. fig. f.
15944. See *Lepidophloios dilatatus* (part).
15947.
15885. *Lepidophyllum acuminatum* Lesquereux. Illustrated specimen.
Pennsylvanian. Grape Creek, near Danville, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas,
1879, p. 14, pl. 69, fig. 37; Text, II, 1880, p. 450.
16240. *Lepidophyllum affine* Lesquereux. Type.
Anthracite series (Penn.). Yatesville, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 69, fig. 31; Text, II, 1880, p. 447.
6491. *Lepidophyllum brevifolium* Lesquereux. Illustrated specimens.
6492. McAlester (Penn.). One-half mile west of McAlester,
6498. Indian Territory.
6501. White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
p. 529, pl. 68, figs. 15-18.

- 16376 **Lepidophyllum campbellianum** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Luzerne
16380. County, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 786, pl. 107, figs. 6, 7.
15908. **Lepidophyllum coriaceum** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 787, pl. 107, fig. 10.
16087. **Lepidophyllum cultriforme** Lesquereux. Types.
16088. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 785, pl. 107, fig. 13?; pl. 108, fig. 2.
16230. **Lepidophyllum elegans** Lesquereux. Type.
16231. Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
nois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 787, pl. 107, fig. 11.
15896. **Lepidophyllum fallax** Lesquereux. Types.
to Pennsylvanian. Rhode Island.
15898. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 786, pl. 107, figs. 4, 5.
16245. **Lepidophyllum gracile** Lesquereux. Type.
Pottsville (Penn.). Campbell's Ledge, Pittston, Luzerne
County, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 786, p. 107, fig. 8.
6078. **Lepidophyllum jenneyi** David White. Types.
6083. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
6084. County, Missouri.
6176. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 214, pl. 59,
figs. 1, 2; pl. 63, fig. 6.
- 16066 **Lepidophyllum linearifolium** Lesquereux. Types.
to Pottsville (Penn.). Boston mine, Pittston, Luzerne County,
16068. Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P
Atlas, 1879, pl. 69, fig. 39, Text, II, 1880, p. 452.
15918. **Lepidophyllum mansfieldi** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 14, pl. 69, fig. 34; Text, II, 1880, p. 449.
16243. **Lepidophyllum minutum** Lesquereux. Type.
Anthracite series (Penn.). Archbald, Lackawanna County,
Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 787, pl. 107, fig. 9.

6059. **Lepidophyllum missouriensis** David White. Types.
 6062. Cherokee, Des Moines (Penn.). Gilkerson's Ford, Henry
 6091. County, Missouri.
 6107. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 216, pl. 58, fig.
 6235. 2; pl. 60, figs. 2, 3; pl. 61, fig. 1a; pl. 62, fig. a.
15916. **Lepidophyllum morrisianum** Lesquereux. Types.
 15917. Allegheny (Penn.). Morris, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 14, pl. 69, figs. 40, 41; Text, II, 1880, p. 448.
16323. **Lepidophyllum ovatifolium** Lesquereux. Type.
 16324. Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
 nois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 14, pl. 69, fig. 32; Text, II, 1880, p. 438 (as *Lepi-*
dostrobus ovatifolius).
16221. **Lepidophyllum stantoni** Lesquereux. Types.
 to Anthracite series (Penn.). Stanton Mine, Wilkesbarre,
 16223. Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 841.
15985. **Lepidophyllum truncatum** Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Beaver County, Pennsyl-
 vania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, II, 1880, p. 458, pl. 69, fig. 9.
16218. **Lepidophyllum tumidum** Lesquereux. Type.
 Anthracite series (Penn.). Wilkesbarre, Luzerne County,
 Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I and II, 1880, p. 448; III, 1884, p. 788, pl. 107, fig. 12.
16178. **Lepidostrobus hastatus** Lesquereux. Type.
 Pottsville (Penn.). Campbells Ledge, Pittston, Pennsyl-
 vania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 69, fig. 27; Text, II, 1880, pp. 438, 439.
16145. **Lepidostrobus latus** Lesquereux. Types.
 16146. Anthracite series (Penn.). Olyphant, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 841.
8796. **Lepidostrobus missouriensis** David White. Type.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 217, pl. 60, fig. 1.
6066. **Lepidostrobus princeps** Lesquereux. Illustrated specimens.
 6071. Cherokee, Des Moines (Penn.). Gilkerson's Ford, Henry
 6088. County, Missouri.
 6098. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 212, pl. 62, fig.
 h; pl. 63, figs. 1, 2; pl. 64, fig. a.

16059. **Lepidostrobos spectabilis** Lesquereux. Types.
 16060. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, II, 1880, p. 435.
16131. **Lepidostrobos truncatus** Lesquereux. Type.
 16132. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 784, pl. 108, fig. 1.
19156. **Lepidoxylon anomalum** (Brongniart) Lesquereux.
 Illustrated specimen.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Proc. Amer. Philos. Soc., XVII, 1878, p. 334; Coal Flora,
 Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, pl. 84,
 figs. 1, 1a-d; Text, II, 1880, p. 557.
7391. **Leptostrobos ? alatus** Ward. Type.
 Lakota (Low. Cret.). Cliff on north side Pine Creek, two
 miles west of Mrs. Dorsett's ranch, Crook County,
 Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 673, pl. 163, figs. 16, 17.
3457. **Leptostrobos foliosus** Fontaine. Types.
 3846. Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal
 and in banks of canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 230, pl. 101, fig. 4;
 pl. 103, fig. 5; pl. 104, fig. 1.
3238. **Leptostrobos longifolius** Fontaine. Types.
 3841 Potomac (Low. Cret.) Fishing hut above Dutch Gap Canal;
 to Fredericksburg; 72d milepost near Brooke; hillside near
 3843. Potomac Run, Virginia.
 3929. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 228-230, pl. 101,
 figs. 2, 3; pl. 102, figs. 1-4; pl. 103, figs. 6-12; pl. 104, fig. 6.
5927. **Leptostrobos longifolius** Fontaine. Illustrated specimens.
 7398. Lakota (Low. Cret.). Cliff on north side Pine Creek, two
 miles west of Mrs. Dorsett's ranch, Crook County,
 Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 671, pl. 162, fig. 15; pl. 165, fig. 3.
3425. **Leptostrobos ? multiflorus** Fontaine. Type.
 Potomac (Low. Cret.). 72d. milepost near Brooke, Vir-
 ginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 230, pl. 165, fig. 6.
13599. **Lescuropteris moorii** (Lesquereux) Schimper.
 Supplemental type.
 Monongahela (Penn.). St. Clairsville, Ohio.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 162.

11744. *Lesleya microphylla* Lesquereux. Type.
Severy (Penn.). Osage, Kansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 831.
= *Neuropteris scheuchzeri*.
50049. *Lindera masoni* Lesquereux. Types.
50150. Dakota (Cret.). Four miles southwest of Brookville,
Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 96, pl. 18,
figs. 9, 10.
2697. *Lindera venusta* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 95, pl. 16,
figs. 1, 2.
5485. *Linopteris gilkinsonensis* David White. Type.
Cherokee, Des Moines (Penn.). Gilkerson's Ford, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 139, pl. 41, figs.
7, 8; Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
p. 510 (as *Dictyopteris gilkinsonensis*).
1576. *Liquidambar europæum* Al. Braun. Illustrated specimen.
Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 159,
pl. 32, fig. 1.
- 7094 to 7096. *Liquidamber europæum* Al. Braun. Illustrated specimen.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 100, pl. 47,
figs. 1-3.
8544. *Liquidamber europæum patulum* Knowlton. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 62, pl. 10, fig. 5.
330. *Liquidamber gracile* Lesquereux. Type.
Green River (Tert.). Washakie Station, near Bridger's
Pass, Carbon County, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv., 1871 [1872], p. 287.
= *Aralia?* *gracilis*.
- 657 to 661. *Liquidambar integrifolium* Lesquereux. Types.
Dakota (Cret.). Eight miles above Salina, Kansas.
Lesquereux, Amer. Jour. Sci., XLVI, 1868, p. 93; Rept. U. S. Geol.
Surv. Terr., VI, Pt. I, 1874, p. 56, pl. 2, figs. 1-3; pl. 24, fig. 2;
pl. 29, fig. 8.
= *Liquidamber obtusilobatus*.

6912. *Liquidamber obtusilobatus* (Heer) Hollick. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 101, pl. 12, fig. 4.
- 657 to 661. *Liquidamber obtusilobatus* (Heer) Hollick. See *Liquidamber integrifolium*.
8534. *Liquidamber pachyphyllum* Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 63, pl. 9, fig. 1.
2504. *Liquidambar protensum* Unger. Illustrated specimen.
Miocene (Tert.). Van Horn's Ranch, John Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 13, pl. 8, fig. 3.
8545. *Liquidamber* sp. Knowlton.
Mascall beds, Miocene (Tert.). South Fork of John Day River, about twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 63, pl. 12, fig. 4.
- 708a. *Liriodendron giganteum* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 93, pl. 22, fig. 2.
6898. *Liriodendron intermedium* Lesquereux. Type.
Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv., VI, Pt. I, 1874, p. 93, pl. 20, fig. 5.
5330. *Liriodendron laramiense* Ward. Type.
Montana (Cret.). Point of Rocks, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 102, pl. 48, fig. 2.
707. *Liriodendron meekii* Heer. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, Proc. Acad. Nat. Sci. Phila., 1858, p. 265; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 6, fig. 6; Mon. XXXV, U. S. Geol. Surv., 1898, p. 95, pl. 6, fig. 6.
706. *Liriodendron primævum* Newberry. Type.
Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 12; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 6, fig. 7; Mon. XXXV, U. S. Geol. Surv., 1898, p. 96, pl. 6, fig. 7.
2689. *Liriodendron primævum* Newberry. Illustrated specimens.
50131. Dakota (Cret.). Ellsworth and Cloud counties, Kansas.
50132. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 203, pl. 26, figs. 1-4.

50133. *Liriodendron semialatum* Lesquereux. Illustrated specimen.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 204, pl. 29,
fig. 3.
2753. *Liriodendron snowii* Lesquereux. Type.
50134. Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 209, pl. 29,
figs. 1, 2.
5349. *Litsea carbonensis* Ward. Type.
Laramie? (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 48, pl. 24, fig. 1.
= *Malapoenna carbonensis*.
50142. *Litsea cretacea* Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of Del-
phos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 96, pl. 15, fig. 2.
= *Malapoenna cretacea*.
4354. *Litsea cuneata* Knowlton. Types.
4372. Fort Union (Tert.). Yellowstone River, one mile below
5132. mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 727,
pl. 92, figs. 2-4.
305. *Litsea weediana* Knowlton. Type.
Livingston (Cret.). Bozeman Coal Field, Montana.
Knowlton, Bull. No. 105, U. S. Geol. Surv., 1893, p. 55.
= *Malapoenna weediana*.
1744. *Lomatia acutiloba* Lesquereux. Types.
1745. Green River (Tert.). Florissant, Colorado.
1747. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
1748. p. 167, pl. 43, figs. 13-16.
662. *Lomatia? saportanea* Lesquereux. Types.
to Dakota (Cret.). Southern Kansas.
664. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 51.
See *Todia? saportanea*.
1779. *Lomatia spinosa* Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 166,
pl. 43, fig. 1.
1769. *Lomatia terminalis* Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1773. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 166,
pl. 43, figs. 2, 4-7.
1749. *Lomatia tripartita* Lesquereux. Types.
1775. Green River (Tert.). Florissant, Colorado.
1777. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 166, pl. 43, figs. 8-10.

8209. *Lonchopteris oblonga* (Emmons) Fontaine. Type.
Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 103, pl. 49, fig. 1.
See *Acrostichites oblongus*.
- 8210 *Lonchopteris oblonga* (Emmons) Fontaine. Illustrated specimens.
to
8212. Triassic. Ellington's, four miles from Lockville, Chatham
County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 285, pl. 38, figs. 8-10.
3489. *Lonchopteris virginiensis* Fontaine. Types.
30960 Triassic. Clover Hill, Richmond Coal Field, Virginia.
to
30964. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 53, pl. 28, figs. 1, 2;
pl. 29, figs. 1-4.
15559. *Lycopodites arborescens* Lesquereux. Type.
Morrow, Pottsville (Penn.). Privett's coal bank, Wash-
ington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 778, pl. 106, fig. 1.
= *Bothrodendron arborescens*.
15552. *Lycopodites simplex* Lesquereux. Type.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsyl-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text III, 1884, p. 779, pl. 106, fig. 2.
91. *Lycopodium lesquereuxiana* Knowlton. Type.
Montana (Cret.). Point of Rocks, Wyoming.
Knowlton, Bull. Geol. Soc. Amer., VIII, 1897, p. 154; Bull. No.
163, U. S. Geol. Surv., 1900, p. 24.
See *Selaginella falcata*.
36. *Lycopodium prominens* Lesquereux. Type.
Green River (Tert.). Near Elko Station, Nevada.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 409; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 45, pl. 5, fig. 13.
118. *Lygodium compactum* Lesquereux. Type.
Laramie (Cret.). Marshall's Mine, Colorado.
Lesquereux, Amer. Journ. Sci. (2), XVI, 1868, p. 206; Rept. U. S.
Geol. Surv. Terr., VII, Pt. II, 1878, p. 64, pl. 5, fig. 9.
4283. *Lygodium kaulfusii* Heer. Illustrated specimens.
4285. Miocene (Tert.). North bank of Lamar River, between
4286. Cache and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 672,
pl. 80, figs. 1-3.

- 30 **Lygodium kaulfusii** Heer. Illustrated specimens.
to Laramie? (Cret.). Barrell Springs, Wyoming.
34. Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 137.
See *Lygodium neuropteroides*.
- 7009 **Lygodium kaulfusii** Heer. Illustrated specimen.
to Green River (Tert.). Green River, Sweetwater County,
7012. Wyoming.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 1, pl. 62,
figs. 1-4.
- 30 **Lygodium neuropteroides** Lesquereux. Types.
to Laramie? (Cret.). Barrel Springs, Wyoming.
34. Lesquereux, Ann. Rept. U. S. Geol. Surv. 1870 [1871], p. 384; 1871
[1872], p. 284; Rept. U. S. Geol. Surv., VII, Pt. II, 1898, p. 61,
pl. 5, figs. 4-7; pl. 6, fig. 1.
=*Lygodium kaulfusii* Heer.
586. **Lygodium trichomanoides** Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 45,
pl. 1, fig. 2.
1802. **Macreightia crassa** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 175,
pl. 34, figs. 16, 17.
18312. **Macrostachya aperta** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Beaver County, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 829, pl. 3, fig. 20.
10964. **Macrostachya communis** Lesquereux. Types.
17740. Allegheny (Penn.). Cannelton, Beaver County, Pennsylv-
17741. vania.
17742. Anthracite series (Penn.). Olyphant, Lackawanna County,
Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 828, pl. 3, fig. 17.
17729. **Macrostachya infundibuliformis** Schimper.
17730. Illustrated specimen.
Allegheny (Penn.). Cannelton, Beaver County, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 3, fig. 14; Text, I, 1880, pp. 60-62.
18314. **Macrostachya lanceolata** Lesquereux. Type.
Pottsville (Penn.). Railroad cut above West Pittston,
Luzerne County, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 721.

18301. *Macrostachya minor* Lesquereux. Type.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 829, pl. 3, fig. 19.
30885. *Macrotæniopteris crassinervis* Feistmantel. Illustrated specimen.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 22, pl. 6, fig. 1.
30886. *Macrotæniopteris magnifolia* (Rogers) Schimper. Illustrated specimens.
to
30888. Triassic. Richmond Coal Field, Virginia.
30979. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 18, pl. 2, fig. 3; pl. 3,
fig. 2; pl. 4, fig. 2; pl. 5, fig. 2.
50011. *Magnolia alternans* Heer. Illustrated specimen.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 201, pl. 34,
fig. 11.
50003. *Magnolia amplifolia* Heer. Illustrated specimen.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 200, pl. 24, fig. 3.
50033. *Magnolia boulayana* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 202, pl. 60, fig. 2.
50064. *Magnolia capellini* Heer. Illustrated specimen.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 203, pl. 66, fig. 1.
4401. *Magnolia culveri* Knowlton. Type.
Miocene (Tert.). East bank of Lamar River, between
Cache and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 720, pl.
92, fig. 5.
7004. *Magnolia elliptica* Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County, Mon-
tana.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 94, pl. 12, fig. 1.
365. *Magnolia hilgardiana* Lesquereux. Illustrated specimen.
Laramie (Cret.). Fishers Peak, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 249,
pl. 44, fig. 4.
50034. *Magnolia lacoena* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 201, pl. 60,
fig. 1.
364. *Magnolia lesleyana* Lesquereux. Type.
Laramie (Cret.). Fishers Peak, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 248,
pl. 44, fig. 1.

4481. **Magnolia microphylla** Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, bed No. 3, Yellow-
stone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 720.
6893. **Magnolia obovata** Newberry. Type.
Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878,
pl. 2, fig. 2.
= *Nyssa vetusta*.
2786. **Magnolia obtusata** Heer. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 201, pl. 60,
figs. 5, 6.
5122. **Magnolia? pollardi** Knowlton. Types.
5123. Fort Union (Tert.). Signal Hill, near Yancey's, Fossil
Forest Ridge, and Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 721, pl.
81, figs. 9, 10.
50062. **Magnolia pseudoacuminata** Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of Del-
phos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 199, pl. 24,
fig. 2.
5374. **Magnolia pulchra** Ward. Type.
Montana (Cret.). Point of Rocks, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 103, pl. 48, figs. 3, 4.
6959. **Magnolia rotundifolia** Newberry. Type.
Laramie (Cret.). Placer Mountain or Fishers Peak, Colo-
rado.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 573; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 95, pl. 59, fig. 1.
50035. **Magnolia speciosa** Heer. Illustrated specimens.
50138. Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 202, pl. 60,
figs. 3, 4.
4470. **Magnolia spectabilis** Knowlton. Types.
4471. Miocene (Tert.). Fossil Forest Ridge, Yellowstone Na-
4473. tional Park.
4475. Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 718,
4491. pl. 93, figs. 1, 2.
366. **Magnolia tenuinervis** Lesquereux. Illustrated specimens.
to Laramie (Cret.). Black Buttes, Wyoming.
369. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 248,
pl. 45, figs. 1-4.

5349. **Malapoenna carbonensis** (Ward) Knowlton. Type.
Laramie? (Cret.). Carbon Station, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 142.
See *Litsea carbonensis*.
50142. **Malapoenna cretacea** (Lesquereux) Knowlton. Type.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 142.
See *Litsea cretacea*.
4355. **Malapoenna lamarensis** Knowlton. Types.
4356. Fort Union (Tert.). Top of bluff below mouth of Elk
4492. Creek on Yellowstone, and Lamar River, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 727, pl.
93, figs. 4, 5.
304. **Malapoenna sessiliflora** (Lesquereux) Knowlton. Type.
Laramie? (Cret.). Evanston, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 142.
See *Laurus sessiliflora* and *Tetranthera sessiliflora*.
305. **Malapoenna weediana** Knowlton. Type.
Livingston (Cret.). Bozeman Coal Field, Montana.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 142.
See *Tetranthera sessiliflora* and *Litsea weediana*.
7016. **Manicaria haydenii** Newberry. Type.
Green River (Tert.). Green River, Sweetwater County,
Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 504; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 31, pl. 64, fig. 3.
6514. **Mariopteris capitata** David White. Type.
McAlester (Penn.). One-half mile west of McAlester,
Indian Territory.
White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p. 482.
See *Mariopteris* (*Pseudopecopteris*) *decipiens*.
6514. **Mariopteris** (**Pseudopecopteris**) **decipiens** Lesquereux.
Illustrated specimen.
McAlester (Penn.). One-half mile west of McAlester,
Indian Territory.
White, Bull. No. 98, U. S. Geol. Surv., 1893, p. 47, pl. 1, figs. 5-8;
pl. 2, figs. 1-3.
= *Mariopteris capitata*.
6743. **Mariopteris occidentalis** David White. Types.
to McAlester (Penn.). Near McAlester, Indian Territory.
6746. White, David, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III,
6749. 1899, p. 480, pl. 67, figs. 1-6.
6751.

6748. **Mariopteris occidentalis villosa** David White. Types.
 6750. McAlester (Penn.). Two miles east of Krebs, McAlester Coal Field, Indian Territory.
 White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p. 482, pl. 67, figs. 8, 8a, 9.
13531. **Mariopteris sphenopteroides** (Lesquereux) Zeiller. Types.
 13532. Allegheny (Penn.). Mazon Creek, Illinois, and Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 32.
 See *Odontopteris sphenopteroides*.
- 5707 **Mariopteris sphenopteroides** (Lesquereux) Zeiller. Illustrated specimens.
 to
 5710. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 31, pl. 9, figs. 1, 2; pl. 10, figs. 1, 2.
5666. **Mariopteris** sp. David White.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 34, pl. 7, fig. 6.
14438. **Mariopteris** sp. David White.
 Cherokee, Des Moines (Penn.). Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 33, pl. 9, fig. 3.
8515. **Marsilea bendirei** Ward. Type.
 (2541.) Mascall beds, Miocene (Tert.). Van Horn's Ranch, John Day Valley, Grant County, Oregon.
 Ward, Fifth Ann. Rept. U. S. Geol. Surv., 1885, p. 446.
 = *Hydrangea bendirei*.
 See *Porana bendirei*.
5925. **Matonidium althausii** (Dunker) Ward. Illustrated specimens.
 7404. Lakota (Low. Cret.). Cliff on north side Pine Creek, near Mrs. Dorsett's Ranch, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 653, pl. 160, figs. 5-8.
31580. **Matonidium althausii** (Dunker) Ward. Illustrated specimen.
 (4004.) Shasta (Low. Cret.). Near Lowrey, Tehama County, California.
 Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 230, pl. 45, fig. 23.
 See *Osmunda dicksonoides*.
- 11448 **Megalopteris dentata** Lesquereux. Types.
 to
 Pottsville (Penn.). Rushville, Ohio.
11450. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 833.
11704. **Megalopteris fasciculata** Lesquereux. Type.
 Pottsville (Penn.). Port Byron, Rock Island County, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, pl. 24, fig. 2; Text, I, 1880, p. 150.

11700. **Megalopteris ? marginata** Lesquereux. Type.
Pottsville (Penn.). Port Byron, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 5, pl. 24, figs. 4, 4a; Text, I, 1880, p. 152.
11463. **Megalopteris serrata** Lesquereux. Types.
11464. Pottsville (Penn.). Rushville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 834.
17038. **Megaphyton elongatum** Kidston. Illustrated specimen.
Upper Coal Measures (Carb.). Radstock, Somerset, Eng-
land.
Trans. Royal Society of Edinburgh, XXXIII, Pt. III, 1888, p. 390,
pl. 26, fig. 1.
17039. **Megaphyton goldenbergii** Weiss. Illustrated specimen.
Cherokee, Des Moines (Penn.). Clinton, Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 61, fig. 4; Text, I, 1880, p. 349.
720. **Menispermities acerifolia** Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 96,
pl. 20, fig. 3.
= *Menispermities menispermifolius*.
See *Acerites menispermifolius*.
714. **Menispermities grandis** Lesquereux. Types.
715. Dakota (Cret.). Near Clay Center, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 80,
pl. 15, figs. 1, 2.
7664. **Menispermities knightii** Knowlton. Type.
Montana (Cret.). West of Harpers Station, Albany County,
Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 61, pl. 15, fig. 2.
720. **Menispermities menispermifolius** (Lesquereux) Knowlton.
See *Menispermities acerifolia* and *Acerites menispermifolius*.
709. **Menispermities obtusiloba** Lesquereux. Types.
to Dakota (Cret.). Bluffs of the Salina River, eight miles above
711. its mouth, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 94,
pl. 25, figs. 1-2; pl. 26, fig. 3.
712. **Menispermities obtusiloba** Lesquereux. Illustrated specimen.
Dakota (Cret.). Salina, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 78,
pl. 15, fig. 4.
713. **Menispermities salinensis** Lesquereux. Illustrated specimens.
713a. Dakota (Cret.). Salina River, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 95,
pl. 20, figs. 4, 5.

3282. **Menispermites tenuinervis** Fontaine. Type.
Potomac (Low. Cret.). Covington street, Baltimore,
Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 322, pl. 172, fig. 8.
3248. **Menispermites virginiensis** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 321, 322, pl. 161,
figs. 1, 2.
5392. **Menispermites virginensis** Fontaine. Illustrated specimens.
5393. Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 360, pl. 4,
figs. 7, 8.
3470. **Mertensides bullatus** (Bunbury) Fontaine. Illustrated specimens.
30895 to Triassic. Clover Hill, Richmond Coal Field, Virginia.
30899. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 35, pl. 15, figs. 2-5;
pl. 16, figs. 1-3; pl. 17, figs. 1, 2; pl. 18, figs. 1, 2; pl. 19, fig. 1.
30900. **Mertensides distans** Fontaine. Type.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 39.
526. **Mimosites linearifolius** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 417; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 300, pl. 59, fig. 7.
= *Mimosites linearis*.
1920. **Mimosites linearifolius** Lesquereux. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 203,
pl. 37, fig. 10.
= *Mimosites linearis*.
See *Cæsalpinia*? *linearis*.
526. **Mimosites linearis** (Lesquereux) Knowlton. Type and illustrated specimen.
1920. Green River (Tert.). Florissant, Colorado.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 145.
See *Mimosites linearifolius* and *Cæsalpinia*? *linearis*.
5356. **?Monimiopsis fraterna** Saporta. Illustrated specimen.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 52, pl. 25, fig. 3.
132. **Musophyllum complicatum** Lesquereux. Types.
to Green River (Tert.). Eight miles southeast of Green
135. River Station, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873,
[1874], p. 418; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 96, pl. 15, figs. 1-4.

4332. **Musophyllum complicatum** Lesquereux. Illustrated specimen.
4484. Fort Union (Tert.). Northeast side of Crescent Hill,
Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 686, pl.
83, fig. 1.
30804. **Myelophycus curvatum** Ulrich. Type.
Yakutat series (Lias). Woody Island, Kadiak, Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 145, pl. 13, fig. 2.
- 143 **Myrica acuminata** Unger. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
146. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 130,
pl. 17, figs. 1-4.
= *Ceratopetalum americanum*.
- 1589 **Myrica alkalina** Lesquereux. Types.
to Green River (Tert.). Alkali Station, Wyoming.
1593. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 149,
pl. 45a, figs. 10, 12-15.
408. **Myrica ambigua** Lesquereux. Types.
774. Livingston (Cret.). Six miles above Spring Canyon, Gal-
latin County, Montana.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 297.
= *Celastrinites ambiguus*.
See *Celastrinites lævigatus*.
- 1653 **Myrica amygdalina** Saporta. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
1656. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 147,
pl. 26, figs. 1-4.
50061. **Myrica aspera** Lesquereux. Type.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 66, pl. 2, fig. 11.
5208. **Myrica bolanderi?** Lesquereux. Illustrated specimen.
Laramie (Cret.). Mount Évarts, near summit, west end,
Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 658, pl.
78, fig. 4.
155. **Myrica brongniartii?** Ettingshausen. Illustrated specimen.
Green River (Tert.). Elko, Nevada.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 135,
pl. 17, fig. 15.
- 1634 **Myrica calicomæfolia** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1639. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
1641. 146, pl. 26, figs. 5-14.
1646. = *Myrica drymeja*.

147. *Myrica copeana* Lesquereux. Type.
Green River (Tert.) Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 411; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 131, pl. 17, fig. 5.
607. *Myrica cretacea* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
p. 392; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 339, pl. 3, fig. 4.
= *Myrica dakotensis*.
1373. *Myrica cuspidata* (Lesquereux) Dawson. Type.
Upper Eocene (Tert.). Coal Harbor, Unga Island, Alaska.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 146.
See *Comptonia cuspidata*.
607. *Myrica dakotensis* Lesquereux. Types.
608. Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 35,
pl. 4, fig. 9.
See *Myrica cretacea*.
- 1647 *Myrica diversifolia* Lesquereux. Types.
to Green River (Tert.) Florissant, Colorado.
1651. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
148, pl. 25, figs. 7, 8, 10, 12.
= *Cratægus flavescens*.
1642. *Myrica drymeja* (Lesquereux) Knowlton. Type.
See *Rhus drymeja*, *Callicoma microphylla*, and *Myrica
calicomæfolia* (catalogue numbers 1634-1636, 1641,
1646).
2572. *Myrica elænoïdes* Lesquereux. Type.
Eocene (Tert.). Wickliffe, Ballard County, Kentucky.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 12, pl. 4, fig. 5.
- 1661 *Myrica fallax* Lesquereux. Types.
to Green River (Tert.) Florissant, Colorado.
1666. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 147,
pl. 32, figs. 11-16.
8291. *Myrica* ? *idahoensis* Knowlton. Type.
Payette (Tert.). Two miles southeast of Marsh, Boise
County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 724, pl. 99, fig. 7.
538. *Myrica insignis* Lesquereux. Type.
Green River (Tert.) Florissant, Colorado.
Lesquereux, Ann. Rep. U. S. Geol. Surv. Terr., 1874 [1876], p. 312;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 135, pl. 65,
figs. 7, 8.

4369. *Myrica lamarensis* Knowlton. Type.
Miocene (Tert.) East bank Lamar River, between Cache
and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 693, pl.
84, fig. 5.
7623. *Myrica lanceolata* Knowlton. Types.
7624. Payette (Tert.). Cartwright Ranch, Shafer Creek, Boise
County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 724, pl. 99, figs. 5, 6.
153. *Myrica latiloba acutiloba* Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 412; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 134, pl. 17, fig. 13.
50069. *Myrica longa* Heer. Illustrated specimen.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 67, pl. 3, fig. 3.
150. *Myrica nigricans* Lesquereux. Types.
151. Green River (Tert.). Green River Station, Wyoming.
401A. Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., Suppl., 1871
[1872], p. 6; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p.
132, pl. 17, figs. 9-11.
50050. *Myrica obliqua* Knowlton. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Knowlton in Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 68,
pl. 64, fig. 16.
1629. *Myrica obscura* Lesquereux. Types.
1630. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 145, pl. 32, figs. 9, 10.
606. *Myrica obtusa* Lesquereux. Type.
Dakota (Cret.). Western Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 63,
pl. 19, fig. 10.
8532. *Myrica oregoniana* Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 33, pl. 3, fig. 4.
154. *Myrica partita* Lesquereux. Type.
Green River (Tert.). Elko, Nevada.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 413; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 134, pl. 17, fig. 14.
1632. *Myrica polymorpha* Schimper. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 146,
pl. 25, fig. 1.

1400. *Myrica premissa* (Lesquereux) Knowlton. Type.
Upper Eocene (Tert.). Chignik Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 222.
See *Comptonia premissa*.
50021. *Myrica schimperii* Lesquereux. Type.
Dakota (Cret.). Four miles southwest of Brookville,
Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 66, pl. 2, fig. 12.
1660. *Myrica scottii* Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 147,
pl. 32, fig. 17.
4399. *Myrica scottii* Lesquereux. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, one-half mile
below Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 692,
pl. 74, fig. 6.
755. *Myrica ? semina* Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 63,
pl. 27, fig. 4.
138. *Myrica torreyi* Lesquereux. Illustrated specimens.
to Laramie (Cret.). Black Buttes, Wyoming.
142. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 129,
813. pl. 16, figs. 3-8, 10.
5361. *Myrica torreyi* Lesquereux. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 32, pl. 14, fig. 5.
148. *Myrica undulata ?* Heer. Illustrated specimens.
149. Green River (Tert.). Elko, Nevada.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 131,
pl. 17, figs. 7, 8.
4487. *Myrica wardii* Knowlton. Type.
5216. Miocene (Tert.). Fossil Forest Ridge, Yellowstone Na-
tional Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 692,
pl. 84, fig. 4.
1594. *Myrica zachariensis* Saporta. Illustrated specimens.
to Green River (Tert.). Alkali Station, Wyoming.
1597. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 146,
pl. 45a, figs. 6-9.
2777. *Myrsine crassa* Lesquereux. Types.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 114, pl. 52,
figs. 2, 3.

50039. *Myrsinites? gaudini* Lesquereux. Illustrated specimens.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 115, pl. 52, fig. 4.
2754. *Myrtophyllum warderi* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 136, pl. 53,
fig. 10.
3211. *Nageiopsis angustifolia* Fontaine. Types.
3800. Potomac (Low. Cret.). Fredericksburg; fishing hut above
3801. Dutch Gap Canal; roadside near Potomac Run; 72d
3804. milepost; near Telegraph Station, Virginia; Fort Wash-
3805. ington, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 202, pl. 86, figs. 8,
9; pl. 87, figs. 2-6; pl. 88, figs. 1, 3, 4, 6-8; pl. 89, fig. 2.
7385. *Nageiopsis angustifolia* Fontaine. Illustrated specimen.
Lakota (Low. Cret.). Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 684, pl. 168, fig. 7.
3290. *Nageiopsis crassicaulis* Fontaine. Type.
3806. Potomac (Low. Cret.). Roadside near Potomac Run; Fred-
3807. ericksburg; Kankey's; 72d milepost near Brooke;
3921. banks of Dutch Gap Canal; fishing hut above Dutch
Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 198, pl. 79, figs. 2,
6; pl. 82, fig. 1; pl. 84, figs. 3, 9, 11.
3214. *Nageiopsis decrescens* Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run (Fred-
ericksburg Area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 199, pl. 77, fig. 3.
3364. *Nageiopsis heterophylla* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 201, pl. 84, fig. 4;
pl. 86, figs. 6, 7; pl. 88, figs. 2, 5.
3442. *Nageiopsis inæquilateralis* Fontaine. Type.
Potomac (Low. Cret.). Kankey's, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 200, pl. 85, fig. 6.
3424. *Nageiopsis latifolia* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 198, 199, pl. 82,
fig. 3.
3210. *Nageiopsis longifolia* Fontaine. Types.
3803. Potomac (Low. Cret.). Fredericksburg; Kankey's; near
3910. Telegraph Station; 72d milepost near Brooke; Deep
3911. Bottom; banks of Dutch Gap Canal, Virginia.
3948. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 195, 196, pl. 75,
fig. 1; pl. 76, figs. 2-6; pl. 77, figs. 1, 2; pl. 78, figs. 1-5; pl. 79,
fig. 7; pl. 85, figs. 1, 2, 8, 9.

4000. **Nageiopsis longifolia** Fontaine. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 259,
pl. 68, fig. 12.
See *Angiopteridium strictinerve?*.
3998. **Nageiopsis longifolia** Fontaine. Illustrated specimens.
3999. Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 259,
pl. 68, figs. 9-11.
7383. **Nageiopsis longifolia** Fontaine? Illustrated specimens.
7384. Lakota (Low. Cret.). Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 683, pl. 168, figs. 5, 6.
8363. **Nageiopsis longifolia** Fontaine. Illustrated specimens.
(2437.) Neocomian or Jurassic. Corwin Coal Mine and Cape Lis-
8424 burne, Alaska.
to Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 171,
8426. pl. 45, figs. 1-5.
8429. See *Baiera palmata* and *Irites alaskana*.
(2320.)
3365. **Nageiopsis microphylla** Fontaine. Types.
3791. Potomac (Low. Cret.). Fredericksburg; roadside near
3802. Potomac Run; fishing hut above Dutch Gap Canal,
3966. Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 201, 202; pl. 84,
fig. 6; pl. 85, fig. 14; pl. 86, figs. 1-3, 5.
3213. **Nageiopsis ovata** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 199, pl. 77, fig. 4;
pl. 80, fig. 5.
3199. **Nageiopsis recurvata** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; banks of Dutch
Gap Canal; fishing hut above Dutch Gap Canal, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 198, pl. 75, fig. 2;
pl. 79, fig. 4; pl. 80, fig. 3.
3447. **Nageiopsis subfalcata** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 203, pl. 168, fig. 4.
3212. **Nageiopsis zamioides** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; banks of Dutch
Gap Canal; fishing hut above Dutch Gap Canal, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 196, 197, pl. 79,
figs. 1, 3; pl. 80, figs. 1, 2, 4; pl. 81, figs. 1-6.

747. *Negundioides acutifolia* Lesquereux. Type-
Dakota (Cret.). Ten miles south of Lancaster, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 97; Rept. U. S.
Geol. Surv. Terr., VI, Pt. I, 1874, p. 97, pl. 21, fig. 5.
569. *Negundo triloba* Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 57; Rept. U. S.
Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 23, fig.
2; Mon. XXXV, U. S. Geol. Surv., 1898, p. 115, pl. 31, fig. 5.
370. *Nelumbium lakesianum* Lesquereux. Types.
371. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., 1873 [1874], p. 403;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 252, pl. 46,
figs. 1, 2 (as *N. lakesii*).
540. *Nelumbo intermedia* Knowlton. Types.
7670. Montana (Cret.). Point of Rocks, Wyoming.
7671. Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 53, pl. 13,
figs. 3-5.
See *Lemna scutata*.
11238. *Neuropteris aldrichi* (Lesquereux) David White. Types.
12087. Pennsylvanian. Jefferson mines, Alabama.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 39, figs. 1-3; Text, I, 1880, p. 171.
See *Callipteridium aldrichi*.
11586. *Neuropteris angustifolia* Brongniart. Illustrated specimens.
11587. Allegheny (Penn.). Morris, Grundy County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 3, pl. 8, fig. 2; Text, I, 1880, p. 89.
= *Neuropteris scheuchzeri*.
10704. *Neuropteris aspera* Lesquereux. Illustrated specimens.
to Allegheny (Penn.). Cannelton and Pittston, Pennsylvania.
10707. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 736, pl. 96, figs. 4-7.
10531. *Neuropteris auriculata* Brongniart. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 3, pl. 6, fig. 11; Text, I, 1880, p. 85.
10785. *Neuropteris carceraria* David White. Types.
10791. Cherokee (Penn.). Lansing, Kansas.
14831. Allegheny (Penn.). Mazon Creek, Grundy County, Illinois.
Allegheny (Penn.). Cannelton, Pennsylvania.
David White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 99.
See *Odontopteris monstrosa*.
10621. *Neuropteris decipiens* Lesquereux. Types.
to Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
10624. nois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 733, pl. 94, figs. 1, 2.

5658. **Neuropteris dilatata** (Lindley and Hutton) Lesquereux. Illustrated specimens.
 5672. Cherokee, Des Moines (Penn.). Pitcher's and Owen's coal
 6038. mines, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 137, pl. 41, fig. 6; pl. 42, fig. 1; pl. 43; pl. 44, fig. 4.
11839. **Neuropteris elrodi** Lesquereux. Type.
 Pittston (Penn.). Alabama.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 3, pl. 13, fig. 4; Text, I, 1880, p. 107.
11840. **Neuropteris elrodi** Lesquereux. Illustrated specimens.
 11841. Pittston (Penn.). Tracy City, Tennessee.
 Pennsylvanian. Dade County, Georgia.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 735, pl. 96, figs. 1, 2.
- 10806 **Neuropteris griffithii** Lesquereux. Types.
 to Anthracite series (Penn.). Port Griffith Railroad cut, near
 10812. Pittston, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 737, pl. 95, figs. 3-8.
6508. **Neuropteris griffithii occidentalis** David White. Type.
 6509. McAlester (Penn.). One-half mile west of McAlester,
 Indian Territory.
 White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p. 505.
- 12667 **Neuropteris harrisi** David White. Types.
 to Allegheny? (Penn.). Near Russellville, Arkansas.
 12670. White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p. 506, pl. 68, figs. 5-9.
- 12072 **Neuropteris hastata** David White. Types.
 to Cherokee (Penn.). Lansing, Kansas.
 12074. White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 97.
- 1621 **Neuropteris lindahli** David White. Types.
 to Erie limestone (Penn.). Kansas City, Kansas.
 1624. White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 96.
 8636.
30861. **Neuropteris missouriensis** Lesquereux. Type.
 Cherokee, Des Moines (Penn.). Clinton Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, I, 1880, p. 104.
5472. **Neuropteris missouriensis** Lesquereux. Illustrated specimens.
 5630. Cherokee, Des Moines (Penn.). Hobbs's and Pitcher's
 to coal mines, Henry County, Missouri.
 5632. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 130, pl. 41, figs. 4, 5; pl. 42, fig. 4; pl. 45, fig. 3.

6526. *Neuropteris missouriensis nervosa* David White. Type.
McAlester (Penn.). Johnsville slopes near Savanna,
McAlester Coal Field, Indian Territory.
White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
p. 508.
10258. *Neuropteris rarinervis* Bunbury. See *Idiophyllum rotundi-*
folium.
3590. *Neuropteris scheuchzeri* Hoffman. Illustrated specimens.
5633. Cherokee, Des Moines (Penn.). Owen's Coal Mine, and
6101. near Gilkerson's Ford, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 132, pl. 36, fig. 4;
pl. 42, fig. 3; pl. 64, fig. d..
11744. *Neuropteris scheuchzeri* Hoffman. Supplemental type.
Severy (Penn.). Osage, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 100.
See *Lesleya microphylla*.
11586. *Neuropteris scheuchzeri* Hoffman. Supplemental types.
11587. Allegheny (Penn.). Morris, Grundy County, Illinois.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 133.
See *Neuropteris angustifolia*.
11155. *Neuropteris smithii* Lesquereux. Type.
Pottsville (Penn.). Alabama.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 3, pl. 13, fig. 2; Text, I, 1880, p. 106.
11156. *Neuropteris smithii* Lesquereux. Illustrated specimen.
Pottsville (Penn.). Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 734, pl. 96, figs. 3, 3a.
8205. *Neuropteris* sp.? Emmons.
Triassic. Chatham County, North Carolina.
Emmons, Geol. Rept. of the Midland Counties of North Carolina,
1856, p. 349, pl. 2, fig. 2.
= *Laccopteris lanceolata*.
See *Pecopteris* sp.
6940. *Nilssonia gibbsii* (Newberry) Hollick. Type.
Puget Sound (Cret.). Point Doughty, Orcas Island,
Washington.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 16, pl. 15, fig. 2.
See *Tæniopteris gibbsii*.
1357. *Nöggerathia spatulata* Dana. Type.
Coal Measures (Penn.). District of Illawarra, New South
Wales, Australia.
Dana, Wilkes, U. S. Expl. Exped., X, 1849, p. 715; Atlas, p. 5,
pl. 12, fig. 9.
= *Nöggerathiopsis spatulata*.

1357. **Nöggerathiopsis spat[h]ulata** (Dana) Feismantel. Type.
Coal Measures (Penn.). District of Illawarra, New South
Wales, Australia.
Feismantel, Mem. Geol. Surv. New South Wales, Pal., No. 3, 1890,
p. 154.
See *Næggerathia spatulata*.
- 7034 to 7036. **Nordenskiöldia borealis** Heer. Illustrated specimen.
Green River (Tert.). Green River, Sweetwater County,
Wyoming.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 137, pl. 65,
fig. 1; pl. 68, figs. 4-6.
50023. **Nordenskiöldia borealis** Heer. Illustrated specimen.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 219, pl. 44, fig. 6.
5355. **Nyssa buddiana** Ward. Type.
Laramie? (Cret.). Hodges Pass, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 53, pl. 25, fig. 4.
6938. **Nyssa (?) cuneata** Newberry. Type.
Puget Sound (Cret.). Point Doughty, Orcas Island,
Washington.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 125, pl. 17, fig. 4.
See *Ficus (?) cuneatus*.
303. 506. **Nyssa lanceolata** Lesquereux. Illustrated specimens.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 245,
pl. 35, figs. 5, 6.
6893. **Nyssa vetusta** Newberry. Type.
Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 125, pl. 1, fig. 2.
See *Magnolia obovata*.
5623. **Odontopteris? bradleyi** Lesquereux. Illustrated specimen.
Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 125, pl. 42, fig. 2.
11287. **Odontopteris deformata** Lesquereux. Type.
Pennsylvanian. Rhode Island.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 141; III, 1884, p. 743, pl. 97, fig. 5.
14831. **Odontopteris monstrosa** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. of Prog.
P, Text, III, 1884, p. 741, pl. 97, fig. 3.
= *Neuropteris carceraria*.
2086. **Odontopteris papilionacea** David White. Type.
Cherokee (Penn.). Lansing, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 95.

- 11274 **Odontopteris patens** Lesquereux. Types.
to Pennsylvanian. Rhode Island.
11276. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P. Text, III, 1884, pp. 740, 741, pl. 97, fig. 7.
13531. **Odontopteris sphenopteroides** Lesquereux. Types.
13532. Allegheny (Penn.). Mazon Creek, Illinois, and Clinton, Henry County, Missouri.
- Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P. Atlas, 1879, p. 4, pl. 21, figs. 3, 4; Text, I, 1880, p. 139.
- = *Mariopteris sphenopteroides*.
8215. **Odontopteris tenuifolius** Emmons. Type.
Triassic. Haywood, Chatham County, North Carolina.
- Emmons, Amer. Geology, VI, 1857, p. 105, pl. 3, fig. 5.
- = *Acrostichites tenuifolius*.
5694. **Oligocarpia missouriensis** David White. Types.
5695. Cherokee, Des Moines (Penn.). Owen's and Pitcher's
5696. coal mines, and near Clinton, Henry County, Missouri.
14467. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 66, pl. 20, fig.
14468. 1; pl. 21, figs. 1-4.
15501. **Omphalophloios cyclostigma** (Lesquereux) David White.
15502. Types.
Cherokee, Des Moines (Penn.). Clinton, Henry County, Missouri.
- White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 221, pl. 66, fig. 1.
- See *Lepidodendron cyclostigma*.
5636. **Omphalophloios cyclostigma** (Lesquereux) David White.
6024. Illustrated specimens.
6025. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
6027. Henry County, Missouri.
- White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 218, pl. 65; pl. 66,
6030. figs. 2-5; pl. 67, figs. 1, 2; pl. 68, figs. 1, 2.
- 8797.
120. **Onoclea fecunda** (Lesquereux) Knowlton. Types.
121. Laramie (Cret.). Marshall mine, near Erie, Colorado.
- Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 153.
- See *Caulinites fecundus*.
- 5106 **Onoclea minima** Knowlton. Types.
to Laramie (Cret.). North of Pinyon Peak, on Wolverine
5109. Creek, Yellowstone National Park.
- Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 656,
pl. 77, figs. 11-15.
6971. **Onoclea sensibilis** Linnæus. Illustrated specimens.
6976. Fort Union (Tert.). Fort Union, Buford County, North
6977. Dakota.
- Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 39; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 8, fig. 1; pl. 9, figs. 1, 2.
- = *Onoclea sensibilis fossilis*.

6971. *Onoclea sensibilis fossilis* Newberry. Types.
 6976. Fort Union (Tert.). Fort Union, Buford County, North
 6977. Dakota.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 8, pl. 23, fig. 3;
 pl. 24, figs. 1, 3.
 See *Onoclea sensibilis*.
8368. *Onychiopsis psilotoides* (Stokes and Webb) Ward. Illustrated specimens.
 8369. Jurassic? Corwin Coal Mine, east of Cape Lisburne, Alaska.
 2434.) Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 155, pl. 39, figs. 3-6.
 See *Aspidium oerstedii*.
128. *Opegrapha antiqua* Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 36, pl. 1, figs. 1, 1a.
1617. *Ophioglossum alleni* Lesquereux. Type.
 Green River (Tert.). South Park, Florissant, Colorado.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 37¹.
 = *Tmesipteris alleni*.
 See *Salvinia alleni*.
641. *Oreodaphne cretacea* Lesquereux. Type.
 Dakota (Cret.). Western Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 84,
 pl. 30, fig. 5.
2525. *Oreodaphne lithæformis* Lesquereux. Type.
 Eocene (Tert.). Lassen County, California.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 30, pl. 14, fig. 4.
16. *Osmunda affinis* Lesquereux. Illustrated specimen.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 60,
 pl. 4, fig. 1.
4288. *Osmunda affinis* Lesquereux. Illustrated specimen.
 5235. Miocene (Tert.). Hill north of Lost Creek, Yellowstone
 National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 673,
 pl. 80, figs. 4, 5.
3260. *Osmunda dicksonioides* Fontaine. Type.
 3779 Potomac (Low. Cret.). Hillside near Potomac Run, Vir-
 to ginia.
 3781. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 146, 147, pl. 41,
 fig. 5; pl. 58, fig. 9; pl. 59, figs. 1, 4, 8, 9, 11; pl. 60, figs. 2, 4,
 5, 9; pl. 61, figs. 1, 2.
4004. *Osmunda dicksonioides* Fontaine. Supplemental types.
 Shasta (Low. Cret.). Near Lowrey, Tehama County, Cali-
 fornia.
 Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
 p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Matonidium althausii* (part).
 = *Gleichenia nordenskiöldi* (part).

3427. *Osmunda dicksonioides latipennis* Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run (Fredericksburg Area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 147, 148, pl. 60, figs. 1, 3; pl. 61, fig. 3.
3392. *Osmunda sphenopteroides* Fontaine. Type.
3440. Potomac (Low. Cret.). Banks of Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 145, 146, pl. 25, fig. 13.
8228. *Otozamites carolinensis* Fontaine. Type.
Triassic. Lockville, Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, pp. 117, 118, pl. 52, fig. 6; in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 298, pl. 42, fig. 6.
See *Albertia latifolia*.
8227. *Otozamites carolinensis* Fontaine. Illustrated specimen.
Triassic. Lockville, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 298, pl. 42, fig. 5.
549. *Ottelia americana* Lesquereux. Illustrated specimen.
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 98, pl. 61, fig. 8.
8243. *Pachyphyllum peregrinum* (Lindley and Hutton) Schimper. Illustrated specimen.
Triassic. Turners Falls, Massachusetts.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 108, pl. 50, fig. 4.
= *Pagiophyllum peregrinum*.
See *Walchia variabilis*.
8245. *Pachypteris* sp.? Emmons.
Triassic. Chatham County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 112, fig. 80.
= *Abietites carolinensis*.
See *Palissya carolinensis*.
3748. *Pagiophyllum dubium* Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 271, pl. 39, figs. 2-11.
8243. *Pagiophyllum peregrinum* (Lindley and Hutton) Schenck. Illustrated specimen.
Triassic. Turners Falls, Massachusetts.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv. Pt. II, 1900, p. 308.
See *Walchia variabilis* and *Pachyphyllum peregrinum*.
8244. *Pagiophyllum peregrinum* (Lindley and Hutton) Schenck. Illustrated specimen.
Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 308, pl. 46.

50022. *Palæocassia laurinea* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 147, pl. 64,
fig. 12.
30782. *Palæodictyon magnum laxum* Ulrich. Type.
Yakutat series (Lias). Woody Island, near Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 137, pl. 15, fig. 1.
25023. *Palæophycus gracilis* Lesquereux. Type.
Pennsylvanian. Vigo County, Indiana.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. B, fig. 10; Text I, 1880, p. 11.
25020. *Palæophycus milleri* Lesquereux. Type.
Pennsylvanian. Vigo County, Indiana.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. A, figs. 8-8p; Text I, 1880, p. 10.
30876. *Paleohillia arkansana* Knowlton. Type.
Trinity (Low. Cret.). Northwest of Center Point, Howard
County, Arkansas.
Knowlton, Bull. Torrey Bot. Club, XXII, No. 9, 1895, pp. 287-290,
text figs. 1-3.
8235. *Palissya braunii* Endlicher. Illustrated specimens.
8236. Triassic. Lockville, Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 107, pl. 50, figs. 1, 2;
pl. 51, fig. 1.
= *Palissya sphenolepis*.
See *Walchia longifolius*.
8241. *Palissya brevifolia* (Emmons) Fontaine. Type.
Triassic. Lockville, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 307.
See *Walchia brevifolia* and *Cheirolepis muensteri*.
8242. *Palissya brevifolia* (Emmons) Fontaine. Illustrated specimen.
Triassic. Lockville, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 307, pl. 45, fig. 4.
8245. *Palissya carolinensis* Fontaine. Type.
Triassic. Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 109, pl. 51, fig. 5.
= *Abietites carolinensis*.
8239. *Palissya diffusa* (Emmons) Fontaine. Illustrated specimens.
8240. Triassic. Ellington's, near Lockville, Chatham County,
North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. I,
1900, p. 306, pl. 45, figs. 2, 3.

8235. *Palissya sphenolepis* (Fr. Braun) Brongniart. Illustrated specimens.
8236. Triassic. Lockville, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 305, pl. 44, figs. 1, 2; pl. 45, fig. 1.
See *Walchia longifolius* and *Palissya braunii*.
50013. *Paliurus anceps* Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 166, pl. 35, fig. 4.
- 412 *Paliurus colombi* Heer. Illustrated specimens.
to Laramie? (Cret.). Carbon, Wyoming.
414. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 273, pl. 50, figs. 13-15.
4346. *Paliurus colombi* Heer. Illustrated specimen.
Miocene (Tert.). Head of Tower Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 740, pl. 101, fig. 7.
5322. *Paliurus colombi* Heer. Illustrated specimens.
5323. Fort Union (Tert.). Burns's Ranch, below Glendive, Montana.
5324. Laramie? (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 75, pl. 33, figs. 8-10.
5396. *Paliurus colombi* Heer. Illustrated specimen.
Eocene (Tert.). Herendeen Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 230, pl. 9, fig. 2.
50015. *Paliurus cretaceus* Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 165, pl. 35, fig. 3.
415. *Paliurus florissanti* Lesquereux. Type.
Green River (Tert.). Near Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 416; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 274, pl. 50, fig. 18.
746. *Paliurus membranaceus* Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 101; Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 108, pl. 20, fig. 6.
50014. *Paliurus membranaceus* Lesquereux. Illustrated specimen.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 167, pl. 35, fig. 5.
- 5116 *Paliurus minimus* Knowlton. Types.
to Laramie (Cret.). North of Pinyon Peak, on Wolverine
5118. Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 659, pl. 77, figs. 7-10.

1869. *Paliurus orbiculatus* Saporta. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 188,
pl. 38, fig. 12.
50012. *Paliurus ovalis* Dawson. Illustrated specimen.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 166, pl. 35, fig. 7.
- 5326 *Paliurus pealei* Ward. Types.
to Fort Union (Tert.). One-half mile from Little Missouri
5328. River, North Dakota.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 76, pl. 33, figs. 13, 14.
5325. *Paliurus pulcherrimus* Ward. Type.
Laramie? (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 75, pl. 33, fig. 11.
416. *Paliurus zizyphoides* Lesquereux. Illustrated specimens.
416a. Laramie (Cret.). Black Buttes, Wyoming.
416b. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 274,
418. pl. 51, figs. 1, 4-6.
5210. *Paliurus zizyphoides?* Lesquereux. Illustrated specimen.
Laramie (Cret.). North of Pinyon Peak, on Wolverine
Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 660, pl.
78, fig. 3.
523. *Palmocarpon commune* Lesquereux. Illustrated specimens.
524. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 119,
pl. 13, figs. 4-7.
= *Palmocarpon palmarum*.
525. *Palmocarpon compositum* Lesquereux. Type.
Laramie? (Cret.). Placer Mountain, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 119,
pl. 11, fig. 4.
See *Carpolithes compositus*.
522. *Palmocarpon corrugatum* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 121,
pl. 11, fig. 11.
520. *Palmocarpon mexicanum* Lesquereux. Illustrated specimen.
Laramie (Cret.). Placer Mountain, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 119,
pl. 11, fig. 5.
523. *Palmocarpon palmarum* Lesquereux. See *Palmocarpon com-*
524. *mune*.
518. *Palmocarpon subcylindricum* Lesquereux. Type.
519. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 121,
pl. 11, figs. 12, 12a.

521. *Palmocarpum truncatum major* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 121,
pl. 11, figs. 6, 7.
517. *Palmocarpum truncatum minor* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 121,
pl. 11, figs. 8, 9.
3651. *Palmoxylon cellulosum* Knowlton. Type.
Miocene? (Tert.). Rapides Parish, Louisiana.
Knowlton, Proc. U. S. Nat. Mus., XI, 1888, p. 90, pl. 30, fig. 2.
- 50026 *Parrotia grandidentata* Lesquereux. Types.
to Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
50028. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 140, pl. 39,
figs. 2-4.
14873. *Pecopteris* cf. *arborescens* (Schlotheim) Brongniart. Illustrated specimen.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 78, pl. 44, fig. 3.
5595. *Pecopteris* cf. *arborescens* (Schlotheim) Brongniart. Illustrated specimens.
5596. Cherokee, Des Moines (Penn.). Gilkersons Ford, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 78, pl. 36, fig. 3;
pl. 47, fig. 6?
5972. *Pecopteris borealis* Brongniart. Illustrated specimen.
7407. Lakota (Low. Cret.). East bank of Oak Creek, near Rob-
bins's Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 655, pl. 160, figs. 14, 15.
3202. *Pecopteris brevipennis* Fontaine. Types.
3923. Potomac (Low. Cret.). Hillside near Potomac Run; fish-
ing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 86, pl. 21, figs. 1-3.
3301. *Pecopteris browniana* Dunker. Illustrated specimens.
3885. Potomac (Low. Cret.). Baltimore, Maryland; Fredericks-
to burg; banks of Dutch Gap Canal; 72d milepost, near
3887. Brooke; hillside near Potomac Run, Virginia.
3922. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 88, pl. 22, figs.
10, 11; pl. 23, figs. 2-7; pl. 26, figs. 3, 13.
= *Cladophlebis browniana*.
- 13172 *Pecopteris clintoni* Lesquereux. Types.
to Cherokee, Des Moines (Penn.). Clinton, Henry County,
13174. Missouri.
30857. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 8, pl. 42, figs. 1, 3, 5; Text, I, 1880, p. 251.
13173. = *Pecopteris pseudovestita*.

5605. **Pecopteris clintoni** Lesquereux. Illustrated specimens.
 5606. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
 County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 94, pl. 34; pl. 35,
 fig. 4.
13181. **Pecopteris clintoni** Lesquereux. Illustrated specimens.
 13183. Cherokee, Des Moines (Penn.). Clinton, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 94.
 See *Callipteridium membranaceum* (part).
13376. **Pecopteris concinna** Lesquereux. Supplemental type.
 Pennsylvanian. Archbald, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa. Rept. Prog. P,
 Text, I, 1880, p. 264.
3233. **Pecopteris constricta** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 86, pl. 20, figs. 1, 2, 4.
5621. **Pecopteris (Dactylothea) dentata** Brongniart.
 5641 Illustrated specimens.
 to Cherokee, Des Moines (Penn.). Owen's and Pitcher's
 5643. coal mines, Henry County, Missouri.
 5655. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 75, pl. 24, figs.
 5739. 1, 2; pl. 25; pl. 26, figs. 2, 3, 4; pl. 27.
 12772. See *Pecopteris pennæformis*.
2526. **Pecopteris denticulata** Heer. Supplemental type.
 Jurassic. Cape Lisburne, Alaska.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 32.
 = *Cladophlebis vaccensis*.
30856. **Pecopteris erosa** Gutbier. Illustrated specimen.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 44, fig. 1; Text, I, 1880, p. 255.
14237. **Pecopteris fontainei** Lesquereux. Illustrated specimens.
 to Allegheny (Penn.). Mazon Creek, Grundy County, Illinois.
 14240. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 46, figs. 4, 5; Text, I, 1880, p. 248; III, 1884,
 p. 761.
14248. **Pecopteris fontainei** Lesquereux. Illustrated specimens.
 14249. Allegheny (Penn.). Mazon Creek, Grundy County, Illinois.
 Lesley, Dictionary Foss. Plants Pa., Second Geol. Surv. Pa., Rept.
 Prog. P 4, II, 1889, p. 606.
12420. **Pecopteris georgiana** Lesquereux. Types.
 to Pottsville (Penn.). Near Cole City, Dade County, Georgia.
 12422. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 759, pl. 98, figs. 6, 6a.

7373. **Pecopteris geyleyriana** Nathorst. Illustrated specimens.
7405. Lakota (Low. Cret.). Near Robbins's Ranch, and north
7414. side Pine Creek, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 654, pl. 16, figs. 9-13.
5594. **Pecopteris (Asterotheca) hemitelioides** Brongniart. Illustrated specimen.
Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 79, pl. 35, fig. 5.
5598. **Pecopteris jenneyi** David White. Types.
5599. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 80, pl. 36,
figs. 1, 2.
12542. **Pecopteris lanceolata** Lesquereux. Type.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 7, pl. 39, figs. 9, 9a; Text, I, 1880, p. 227.
See *Alethopteris lanceolata*.
3382. **Pecopteris lyratifolia** (Goeppert) Lesquereux. Illustrated specimen.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 8, pl. 48, figs. 4, 4a-c; Text, I, 1880, p. 259.
3326. **Pecopteris microdonta** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; entrance to Trent's
Reach; near Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 85, pl. 19, fig. 8;
pl. 20, figs. 5, 11.
7431. **Pecopteris montanensis** Fontaine. Type.
Kootanie (Low. Cret.). Great Falls, Montana.
Fontaine, Proc. U. S. Nat. Mus., XV, 1892, p. 492, pl. 83, figs. 1, 1a.
589. **Pecopteris nebraskana?** Heer. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 46,
pl. 29, figs. 5, 5a (as *Pteris nebraskana*).
- 13377 **Pecopteris obsoleta** Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
13379. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 758, pl. 111, figs. 29, 29a, 29b.
30848. **Pecopteris? odontopteroides** Hall. Type.
Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166), 1845,
p. 306, pl. 1, fig. 4.
- 13385 **Pecopteris ornata** Lesquereux. Types.
to Allegheny (Penn.). Mazon Creek, Illinois.
13388. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 760, pl. 111, figs. 30, 30a, 30b.

3327. **Pecopteris ovatodentata** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 85, pl. 15, fig. 8;
pl. 22, fig. 12; pl. 23, fig. 1.
3355. **Pecopteris pachyphylla** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 88, pl. 26, figs. 4, 5.
12772. **Pecopteris pennæformis** Brongniart. Illustrated specimen.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 8, pl. 45, figs. 1, 1a; Text, I, 1880, p. 239.
= *Pecopteris (Dactylothea) dentata*.
2202. **Pecopteris powellii** Lesquereux. Type.
Triassic? City of Mexico, Mexico.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 26, pl. 1, figs. 1, 1a.
5644. **Pecopteris pseudovestita** David White. Types.
5645. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, and
5648. Clinton, Henry County, Missouri.
5725. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 85, pl. 28, figs. 1,
5809. 2, 3; pl. 29; pl. 30; pl. 31; pl. 32.
See *Pecopteris clintoni* (part). (Also catalogue numbers
13093, 13097, 13173, 13179.)
12702. **Pecopteris quadratifolia** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 234; III, 1884, p. 756, pl. 100, fig. 1.
14870. **Pecopteris resupinata** Lesquereux. Types.
14871. Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
nois.
Lesley, Dictionary Foss. Plants Pa., Second Geol. Surv. Pa., Rept.
Prog. P 4, II, 1889, p. 608.
6423. **Pecopteris richardsoni** David White. Types.
6426. McAlester (Penn.). One-half mile west of McAlester,
6427. Indian Territory.
White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
p. 492, pl. 68, figs. 2-4.
12523. **Pecopteris robusta** Lesquereux. Types.
to Pennsylvanian. Port Griffith, Luzerne County, Pennsylv-
12525. ania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 7, pl. 39, figs. 7, 8; Text, I, 1880, p. 229.
7042. **Pecopteris (Phegopteris) sepulta** Newberry. Types.
7043. Green River (Tert.). Green River, Sweetwater County,
Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 593.
= *Pecopteris (Cheilanthes) sepulta*.

7042. **Pecopteris (Cheilanthes) sepulta** Newberry. Types.
 7043. Green River (Tert.). Green River, Sweetwater County,
 Wyoming.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 12, pl. 62,
 figs. 5, 6.
 See *Pecopteris (Phegopteris) sepulta*.
- 13929 **Pecopteris serpillifolia** Lesquereux. Types.
 to Allegheny (Penn.). Mazon Creek, Illinois.
 13931. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 8, pl. 46, figs. 1, 1a, 2, 2a, 3, 3a-d; Text, I, 1880,
 p. 237.
- 13864 **Pecopteris serrulata** Hartt. Illustrated specimens.
 to Pottsville (Penn.). Washington County, Arkansas, and
 13868. Tracy City, Tennessee.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 757, pl. 101, figs. 4, 4a, 6, 6a, 8.
12676. **Pecopteris squamosa** Lesquereux. Illustrated specimen.
 Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 7, pl. 39, figs. 13, 13a; Text, I, 1880, p. 235.
3197. **Pecopteris strictinervis** Fontaine. Types.
 3302. Potomac (Low. Cret.). Fredericksburg, Virginia; and
 3810. Covington street, Baltimore, Maryland.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 84, pl. 13, figs. 6-8;
 pl. 19, fig. 9; pl. 20, fig. 3; pl. 22, fig. 13; pl. 170, figs. 5, 6.
 = *Cladophlebis alata*.
4002. **Pecopteris strictinervis** Fontaine. Supplemental type.
 Shasta (Low. Cret.). Near Lowrey, Tehama County,
 California.
 Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
 p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Cladophlebis alata*.
4002. **Pecopteris strictinervis** Fontaine. Supplemental type.
 Shasta (Low Cret.). Near Lowrey, Tehama County, Cali-
 fornia.
 Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
 p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
 = *Gleichenia nordenskiöldi*?
2654. **Pecopteris undulata** Hall. Type.
 Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
 Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166),
 1845, p. 306.
13127. **Pecopteris vestita** Lesquereux. Types.
 13160. Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 43, figs. 1, 3, 3a; Text, I, 1880, p. 252.

5646. **Pecopteris vestita** Lesquereux. Illustrated specimens.
 5647. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
 5683. County, Missouri.
 5684. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 91, pl. 33, figs.
 5685. 1-6; pl. 26, fig. 1.
 5688.
 5808.
6702. **Pecopteris vestita minor** David White. Type.
 McAlester (Penn.). Two miles east of Krebs, McAlester
 Coal Field, Indian Territory.
 White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
 p. 495.
3201. **Pecopteris virginensis** Fontaine. Types.
 3808 Potomac (Low. Cret.). Dutch Gap Canal; fishing hut
 to above Dutch Gap Canal; Fredericksburg; roadside
 3811. near Potomac Run; 72d milepost, near Brooke; near
 3926. Telegraph Station, Virginia; and Covington street,
 Baltimore.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 82, pl. 8, figs. 1-7;
 pl. 9, figs. 1-6; pl. 24, fig. 2; pl. 169, fig. 3.
8205. **Pecopteris** sp. Emmons.
 Triassic. Chatham County, North Carolina.
 Emmons, Amer. Geology, VI, 1857, p. 104, pl. 6, fig. 2.
 = *Laccopteris lanceolata*.
 See *Neuropteris* sp.
5609. **Pecopteris** sp. David White.
 5613. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
 County, Missouri.
 White, Geol. Soc. Amer., Bull. No. 8, 1897, p. 291.
 = *Aloiopteris* (*Corynepteris*?) *winslovii*.
2527. **Persea dilleri** Lesquereux. Type.
 Miocene (Tert.). Shasta County, California.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 27, pl. 13, figs. 2-4.
639. **Persea nebrascensis** Lesquereux. Type.
 Dakota (Cret.). Decatur, Nebraska.
 Lesquereux, Trans. Amer. Philos. Soc., XIII, 1869, p. 431, pl. 23,
 fig. 10.
 = *Laurus nebrascensis*.
4326. **Persea pseudo-carolinensis** Lesquereux.
 Illustrated specimen.
 Miocene (Tert.). East bank of Lamar River, between
 Cache and Calfee creeks, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 725,
 pl. 95, fig. 4.
2529. **Persea punctulata** Lesquereux. Type.
 Miocene? (Tert.). Corral Hollow, Alameda County, Cali-
 fornia.
 Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 26, pl. 14, fig. 1.

2705. *Persea schimperi* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 103, pl. 16, fig. 5.
640. *Persea sternbergii* Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 76,
pl. 7, fig. 1.
2796. *Phaseolites formus* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 147, pl. 55, fig. 5.
97. *Phragmites alaskana* Heer. Illustrated specimen.
Livingston (Cret.). Six miles above Spring (Rocky) Can-
yon, near Fort Ellis, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 90,
pl. 8, fig. 10.
4217. *Phragmites alaskana* Heer. Illustrated specimens.
4218. Fort Union (Tert.). Burns's Ranch, below Glendive, Mon-
tana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 17, pl. 3, figs. 1, 2.
602. *Phragmites cretaceus* Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 55,
pl. 29, fig. 7.
5104. *Phragmites falcata* Knowlton. Type.
Laramie (Cret.). Near summit of Mount Evarts, west
end, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 658,
pl. 78, fig. 5.
4497. *Phragmites? latissima* Knowlton. Type.
Fort Union (Tert.). Northeast side of Crescent Hill, Yel-
lowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 683, pl.
83, fig. 5.
93. *Phragmites œningensis* Al. Braun. Illustrated specimen.
Denver? (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 88,
pl. 8, fig. 2.
2756. *Phyllites amissus* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 217, pl. 62, fig. 1.
6904. *Phyllites amorphus* Lesquereux. Illustrated specimen.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 113,
pl. 22, fig. 3.
3766. *Phyllites arctica* Knowlton. Type.
Eocene (Tert.). Herendeen Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 230, pl. 9, figs.
10, 11.

754. *Phyllites betulæfolius* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Trans. Amer. Phil. Soc., XIII, 1869, p. 430, pl. 23, fig. 4; Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 112, pl. 28, fig. 7.
8537. *Phyllites bifurcicus* Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 86, pl. 16, fig. 2.
578. *Phyllites carneosus* Newberry. Types.
6986. Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 75; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 26, figs. 1, 2; Mon. XXXV, U. S. Geol. Surv., 1898, p. 134, pl. 41, fig. 1.
2722. *Phyllites celatus* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 215, pl. 61, fig. 1.
4305. *Phyllites crassifolia* Knowlton. Types.
4309. Miocene (Tert.). Fossil Forest Ridge, and Specimen Ridge, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 753, pl. 102, figs. 1, 5.
577. *Phyllites cupanioides* Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 74; Mon. XXXV, U. S. Geol. Surv., 1898, p. 135, pl. 41, fig. 3.
= *Pterospermites cupanioides*.
See *Phyllites venosus*.
17006. *Phyllites cupanioides* Newberry. Illustrated specimen.
Fort Union (Tert.). Tongue River, Custer County, Montana.
Newberry, U. S. Geol. Surv., Terr., Ills. Cret. and Tert. Plants, 1878, pl. 20, fig. 5.
= *Quercus dubia*.
90. *Phyllites cyclophylla* (Lesquereux) Hollick. Type.
Green River (Tert.). Middle Park, Colorado.
Hollick, Bull. Torr. Bot. Club, XXI, 1894, p. 256, pl. 205, fig. 11.
See *Salvina cyclophylla*.
2749. *Phyllites durescens* Lesquereux. Types.
50149. Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 218, pl. 62, figs. 3, 4.
2726. *Phyllites erosus* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 216, pl. 61, fig. 4.

8312. *Phyllites flexuosus* Knowlton. Type.
Payette, Miocene (Tert.). Two miles southeast of Marsh,
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 735, pl. 102, fig. 8.
2397. *Phyllites fraxineus* Lesquereux. Type.
Pleistocene (Tert.) Bridgeton, New Jersey.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 46.
50122. *Phyllites ilicifolius* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, four miles southwest of
Brookville, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 213, pl. 10, fig. 9.
537. *Phyllites improbatus* Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p.
107, pl. 14, fig. 18.
8547. *Phyllites inexpectans* Knowlton. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 86, pl. 16, fig. 6.
50053. *Phyllites innectens* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 219, pl. 65, fig. 6.
50123. *Phyllites laoei* Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 213, pl. 45, fig. 6.
2396. *Phyllites mimusopsoides* Lesquereux. Type.
Pleistocene (Tert.). Bridgeton, New Jersey.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 46.
704. *Phyllites obcordatus* Heer. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 136, pl. 5, fig. 2.
See Leguminosites marcouanus.
7635. *Phyllites obscurus* Knowlton. Types.
8313. Payette, Miocene (Tert.). Two miles southeast of Marsh
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 735, pl. 99, figs. 10, 11.
= *Phyllites payettensis*.
7590. *Phyllites oregonianus* Knowlton. Type.
Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 49, pl. 5, fig. 5.
3297. *Phyllites pachyphyllus* Fontaine. Types.
3860. Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 325, pl. 149, fig. 2.

7635. **Phyllites payettensis** Knowlton. * Types.
 8313. Payette, Miocene (Tert.). Two miles southeast of Marsh
 Boise County, Idaho.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 163.
 See *Phyllites obscurus*.
8554. **Phyllites personatus** Knowlton. Type.
 Clarno beds, Eocene (Tert.). Road crossing Cherry Creek,
 Crook County, Oregon.
 Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 87, pl. 16, fig. 4.
753. **Phyllites rhoifolius** Lesquereux. Types.
 6907. Dakota (Cret.). Lancaster County, Nebraska.
 Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 101; Rept. U. S. Geol.
 Surv. Terr., VI, Pt. I, 1874, p. 111, pl. 22, figs. 5, 6.
644. **Phyllites rhomboideus** Lesquereux. Type.
 Dakota (Cret.). Near Decatur, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 112,
 pl. 6, fig. 8.
 See *Ficus? rhomboidea*.
262. **Phyllites sapindiformis** Lesquereux. Type.
 Green River (Tert.). Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 301,
 pl. 29, figs. 6, 7.
30078. **Phyllites saundersi** Knowlton. Types.
 30091. Eocene (Tert.). Kukak Bay, Alaska.
 Knowlton, Harriman Alaska Exped., IV, 1904, p. 157, pl. 25, fig. 2;
 pl. 33, fig. 2.
751. **Phyllites umbonatus** Lesquereux. Type.
 Dakota (Cret.). Near Beatrice, Nebraska.
 Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 102; Rept. U. S. Geol.
 Surv. Terr., VI, Pt. I, 1874, p. 113, pl. 19, fig. 4.
752. **Phyllites vanonæ** Heer. Illustrated specimen.
 Dakota (Cret.). Near Decatur, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 113,
 pl. 20, fig. 7.
50051. **Phyllites vanonæ** Heer. Illustrated specimens.
 50137. Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 214, pl. 20, fig. 9;
 pl. 42, fig. 5.
6899. **Phyllites vanonæ** Heer. Illustrated specimen.
 Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 136, pl. 3, fig. 4.
 See *Diospyros primæva*.
573. **Phyllites venosus** Newberry. Type.
 Fort Union (Tert.). Fort Union, North Dakota.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 75; U. S. Geol.
 Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 24, fig. 4;
 Mon. XXXV, U. S. Geol. Surv., 1898, p. 136, pl. 30, fig. 4.

577. *Phyllites venosus?* Newberry. Illustrated specimen.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878,
pl. 26, fig. 3.
= *Phyllites cupanioides*.
50052. *Phyllites zamiaeformis* Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 23, pl. 2, fig. 7.
7644. *Phyllites* sp. Knowlton.
Montana (Cret.). North Fork of Dutton Creek, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 75, pl. 19, fig. 5.
8549. *Phyllites* sp. Knowlton.
Clarno beds, Eocene (Tert.). Cherry Creek, Crook County,
Oregon.
Knowlton Bull. No. 204, U. S. Geol. Surv., 1902, p. 85, pl. 17.
7591. *Phyllites* sp. Knowlton.
Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 50, pl. 6, fig. 1.
3395. *Phyllocladops heterophylla* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 204, pl. 84, fig. 5;
pl. 167, fig. 4.
590. *Phyllocladus subintegrifolius* Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLV, 1868, p. 92; Rept. U. S. Geol.
Surv. Terr., VI, Pt. I, 1874, p. 54, pl. 1, fig. 12.
= *Protophyllocladus subintegrifolius*.
See *Thinnfeldia subintegrifolia*.
- 50108 to 50110. *Phyllocladus subintegrifolius* Lesquereux. Illustrated specimens.
Dakota (Cret.). Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 34, pl. 2, figs. 1-3.
= *Protophyllocladus subintegrifolius*.
See *Thinnfeldia subintegrifolia*.
1361. *Phyllothea australis* Brongniart. Illustrated specimen.
Upper Coal Measures (Penn.). Newcastle, New South Wales,
Australia.
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 718; Atlas, p. 5, pl. 13,
fig. 6; pl. 14, fig. 1.
30070. *Picea harrimani* Knowlton. Types.
30071. Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 152, pl. 22, figs. 3, 4.
30075. *Picea* sp. Knowlton.
30079. Eocene (Tert.). Kukak Bay, Alaska.
30090. Knowlton, Harriman Alaska Exped., IV, 1904, p. 151, pl. 24, fig. 3;
pl. 25, figs. 3, 4; pl. 33, fig. 1.

1782. *Pimelia delicatula* Lesquereux. Types.
 1783. Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
 p. 168, pl. 33, figs. 15, 16.
30871. *Pinoxylon dacotense* Knowlton. Type.
 Upper Jurassic? Three miles northwest of Sturgis, South
 Dakota.
 Knowlton in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
 1900, p. 420, pl. 179.
1618. *Pinus florissanti* Lesquereux. Type.
 Green River (Tert.). Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
 138, pl. 21, fig. 13.
5091. *Pinus gracilistrabus* Knowlton. Type.
 Miocene (Tert.). Fossil Forest Ridge, Yellowstone National
 Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 676,
 pl. 80, fig. 12.
4427. *Pinus iddingsii* Knowlton. Type.
 Fort Union (Tert.). Gulch northwest of peak west of
 Dunraven, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 680, pl.
 82, figs. 8, 9.
8179. *Pinus lindgrenii* Knowlton. Type.
 Pliocene. Snake River Valley near Bernards Ferry, Idaho.
 Knowlton, Torreya, I, No. 10, 1901, p. 113, figs. 1, 2.
5157. *Pinus macrolepis* Knowlton. Type.
 Miocene (Tert.). Cliff west of Fossil Forest Ridge, Yel-
 lowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 679,
 pl. 80, fig. 11.
- 69 to 71. *Pinus palæostrobus?* Ettingshausen. Illustrated specimens.
 Green River) Tert.). Near Costello's Ranch, Florissant,
 Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 83,
 pl. 7, figs. 25-28, 31.
600. *Pinus quenstedti* Heer. Illustrated specimens.
 605. Dakota (Cret.). North of Salina and Fort Harker, Kansas,
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 33,
 pl. 1, figs. 3, 4.
5923. *Pinus susquaensis* Dawson. Illustrated specimen.
 Lakota (Low. Cret.). Cliff north side Pine Creek, near
 Mrs. Dorsett's Ranch, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 670, pl. 163, fig. 13.
- 5973a. *Pinus susquaensis* Dawson. Illustrated specimen.
 Lakota (Low. Cret.). Cliff on east bank Oak Creek, near
 Robbins's Ranch, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 670, pl. 163, figs. 11a, 12.

5144. *Pinus wardii* Knowlton. Type.
 5152. Miocene (Tert.). Fossil Forest Ridge, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 679.
3746. *Pinus* sp.? Fontaine.
 Trinity (Low. Cret.). Glenrose, Texas.
 Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 269, pl. 36, fig. 11.
7630. *Pinus* sp. Knowlton.
 Payette (Miocene). Idaho City, Idaho.
 Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898, p. 722, pl. 119, fig. 3.
7594. *Pinus* sp. Knowlton.
 7595. Miocene (Tert.). Three miles southeast of Ashland, Oregon.
 Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900, p. 39, pl. 1, figs. 3, 4.
30073. *Pinus* sp.? Knowlton.
 30074. Eocene (Tert.). Kukak Bay, Alaska.
 Knowlton, Harriman Alaska Exped., IV, 1904, p. 151, pl. 23, fig. 2; pl. 24, fig. 1.
3378. *Pinus* sp.? Fontaine (seed).
 Potomac (Low. Cret.). Covington street, Baltimore, Maryland.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 272, pl. 170, fig. 4.
72. *Pinus* sp. Lesquereux (scale of cone).
 Green River (Tert.). Near Costello's Ranch, Florissant, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 84, pl. 7, fig. 32.
301. *Pisonia racemosa* Lesquereux. Types.
 322. Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 400; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 209, pl. 35, fig. 4.
539. *Pistia corrugata* Lesquereux. Illustrated specimens.
 to Montana (Cret.). Point of Rocks, Wyoming.
 543. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 103, pl. 61, figs. 1, 3-6, 11.
30868. *Pityoxylon alderstoni* Knowlton. Type.
 Miocene (Tert.). Head of Crystal Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, 1899, p. 763, pls. 106, 109, 112, 113, 118, figs. 3, 4; pl. 119, fig. 2.
30869. *Pityoxylon amethystinum* Knowlton. Type.
 Miocene (Tert.). Head of Crystal Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 764, pls. 107, 108, 114, 115, 118, figs. 1, 2.

30870. *Pityoxylon microporosum brandonianum* Knowlton. Type.
Miocene? (Tert.). Brandon, Vermont.
Knowlton, Bull. Torrey Bot. Club, Nov., 1902, p. 639, pl. 25,
figs. 9, 10.
30867. *Pityoxylon pealei* Knowlton. Type.
Miocene (Tert.). Upper Gallatin Basin, Montana.
Knowlton, Bull. Torrey Bot. Club, XXIII, 1896, p. 251, pl. 271.
7002. *Planera crenata* Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County, Mon-
tana.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 81, pl. 57, fig. 3.
234. *Planera longifolia* Lesquereux. Type.
Green River (Tert.). Costello's Ranch, Florissant, Colo-
rado.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 37; *ibid.*, 1873 [1874], p. 413; Rept. U. S. Geol. Surv. Terr.,
VII, Pt. II, 1878, p. 189, pl. 27, fig. 4.
1713. *Planera longifolia* Lesquereux. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
1724. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
161, pl. 29, figs. 1-13.
1725. *Planera longifolia myricæfolia* Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1737. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
161, pl. 29, figs. 15-27.
237. *Planera microphylla* Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 55; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, fig. 4;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 81, pl. 33, fig. 4.
7037. *Planera nervosa* Newberry. Types.
7038. Green River (Tert.). Green River, Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 508; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 82, pl. 67, figs. 2, 3.
236. *Planera ungeri* Ettingshausen. Illustrated specimen.
Green River (Tert.). Costello's Ranch, near Florissant,
Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 190,
pl. 27, fig. 7.
7039. *Planera variabilis* Newberry. Types.
to Green River (Tert.). Green River, Wyoming.
7941. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 508; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 83, pl. 66, figs. 5, 6.
241. *Platanus aceroides* Goepfert. Illustrated specimen.
Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 184,
pl. 25, fig. 4.

2535. *Platanus aceroides* Goepfert. Illustrated specimen.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 19, pl. 5, fig. 7.
- 7079 *Platanus aspera* Newberry. Types.
to Upper Eocene (Tert.). Bridge Creek, Crook County,
7083. Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 509; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 102, pl. 42, figs. 1-3; pl. 54, fig. 5,
pl. 59, fig. 3.
- 4088 *Platanus basilobata* Ward. Types.
to Fort Union (Tert.). Seven Mile Creek, and Clear Creek,
4092. near Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 35, pl. 17, fig. 1;
pl. 18, figs. 1-3; pl. 19, fig. 1.
2736. *Platanus cissoides* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 75, pl. 61, fig. 3.
6001. *Platanus cissoides* Lesquereux. Illustrated specimen.
Dakota (Cret.). Evans's quarry on Minnekahta Creek, four
miles below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 706,
pl. 171, fig. 2.
193. *Platanus cordata* Knowlton. Type.
Laramie? (Cret.). Carbon, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 169.
See *Quercus platania*.
238. *Platanus guillelmæ* Goepfert. Illustrated specimen.
Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 183,
pl. 25, fig. 1.
239. *Platanus guillelmæ* Goepfert. Illustrated specimens.
240. Denver? (Cret.). Washakie Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 183,
pl. 25, figs. 2, 3.
4096. *Platanus guillelmæ* Goepfert. Illustrated specimen.
Fort Union (Tert.). Left bank of Yellowstone, Burn's
Ranch, below Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 37, pl. 20, fig. 1.
4238. *Platanus guillelmæ* Goepfert. Illustrated specimen.
Miocene (Tert.). Fossil Forest Ridge, bed No. 1, Yellow-
stone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 727, pl.
96, fig. 1.
4430. *Platanus guillelmæ* Goepfert. Illustrated specimen.
Fort Union (Tert.). East bank of Lamar River, between
Cache and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 727, pl. 97,
fig. 5.

6963. *Platanus haydenii* Newberry. Illustrated specimen.
Eocene? (Tert.). La Bontes Creek, Converse County,
Wyoming.
Newberry, U. S. Geol. Surv. Terr., Ills. Tert. and Cret. Plants,
1878, pl. 21; Mon. XXXV, U. S. Geol. Surv., 1898, p. 103, pl. 38.
6991. *Platanus haydenii* Newberry. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, Dawson County,
Montana.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 103, pl. 56,
fig. 3.
242. *Platanus haydenii?* Newberry. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, pl. 25,
fig. 6.
631. *Platanus heerii* Lesquereux. Illustrated specimens.
632. Dakota (Cret.). Bluffs of the Salina River, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 70,
pl. 8, fig. 1; pl. 9, fig. 1.
4094. *Platanus heerii* Lesquereux. Illustrated specimens.
4095. Laramie (Cret.). Black Buttes, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 34, pl. 15, figs. 3, 4.
654. *Platanus latiloba* Newberry. Type.
Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 23; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 2, fig. 4; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 105, pl. 1, fig. 4.
321. *Platanus marginata* (Lesquereux) Heer. See *Viburnum mar-*
322. *ginatum*.
4360. *Platanus montana* Knowlton. Types.
5131. Miocene (Tert.). East slope of hill three-fourths of a mile
south from Yancey's, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 728,
pl. 96, figs. 2, 3.
6891. *Platanus newberryana* Heer. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 72,
pl. 8, fig. 2.
251. *Platanus nobilis* Newberry. Type.
Fort Union (Tert.). Near Fort Clark, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 67; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 17, fig. 1;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 106, pl. 34.
4093. *Platanus nobilis* Newberry. Illustrated specimen.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 35, pl. 16, fig. 1.

6964. *Platanus nobilis* Newberry. Illustrated specimen.
Fort Union (Tert.). Fort Clark, North Dakota.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 106, pl. 50, fig. 1.
629. *Platanus obtusiloba* Lesquereux. Types.
630. Dakota (Cret.). Beatrice, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 97; Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 69, pl. 7, figs. 3, 4.
8562. *Platanus occidentalis* Linnæus. Supplemental types.
8579. Interglacial (Pleistocene). Morgantown, West Virginia.
8580. Knowlton in I. C. White, Amer. Geol., XVIII, 1896, p. 371.
8596
to
8598.
327. *Platanus platanoides* (Lesquereux) Knowlton. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 171.
See *Viburnum platanoides*.
628. *Platanus primæva* Lesquereux. Illustrated specimen.
Dakota (Cret.). Lancaster County, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 69, pl. 7, fig. 2.
50001. *Platanus primæva* Lesquereux. Illustrated specimens.
50002. Dakota (Cret.) Ten miles northeast of Delphos, Kansas.
50004. Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 72, pl. 8, figs.
50005. 7-8a; pl. 10, fig. 1.
2730. *Platanus primæva integrifolia* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 74, pl. 49, fig. 4.
7000. *Platanus raynoldsii* Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County, Montana.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 69; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 18; Mon. XXXV, U. S. Geol. Surv., 1898, p. 109, pl. 35.
247. *Platanus raynoldsii* Newberry. Illustrated specimens.
to Denver (Cret.). Golden, Colorado.
249. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 185, pl. 27, figs. 1-3.
4097. *Platanus raynoldsii* Newberry. Illustrated specimens.
4098. Fort Union (Tert.). Clear Creek, fifteen miles above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 37, pl. 20, figs. 2, 3.
243. *Platanus raynoldsii integrifolia* Lesquereux. Type.
244. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 185, pl. 26, figs. 4, 5.

656. *Platanus recurvata* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 71,
pl. 10, fig. 3.
= *Sassafras* (*Araliopsis*) *recurvatum*.
245. *Platanus rhomboidea* Lesquereux. Types
246. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. Geol. Surv. Terr., VII, Pt. II, 1878, p. 186, pl. 26,
figs. 6, 7.
326. *Platanus rhomboidea* Lesquereux. See *Viburnum anceps*.
30872. *Platinium haydeni* Felix. Illustrated specimen.
Miocene (Tert.). Near head of Crystal Creek, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 767,
pl. 120, figs. 3-5.
3237. *Platypterigium densinerve* Fontaine. Type.
3330. Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 169, pl. 30, fig. 8;
pl. 31, figs. 1, 4; pl. 32, figs. 1, 2; pl. 33, fig. 1; pl. 34, fig. 1;
pl. 35, figs. 1, 2.
3410. *Platypterigium rogersianum* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 171, pl. 31, fig. 2;
pl. 33, fig. 2; pl. 34, fig. 2.
25255. *Plinthiotheca angularis* (Lesquereux) David White. Types.
25256. Anthracite (Penn.). Railroad cut near Port Griffith, Lu-
zerne County, Pennsylvania.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 101.
See *Lepidocystis angularis*.
485. *Podogonium americanum* Lesquereux. Types.
581. Laramie (Cret.). Black Buttes, Wyoming.
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 298,
pl. 59, fig. 5; pl. 63, fig. 2.
= *Cassia podogonioides*.
3740. *Podozamites acutifolius* Fontaine? Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus. XVI, 1893, p. 266, pl. 36, fig. 7.
8226. *Podozamites? carolinensis* Fontaine. Type.
Triassic. Lockville? Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
1900, p. 298, pl. 42, fig. 4.
3264. *Podozamites distantinervis* Fontaine. Type.
3889. Potomac (Low. Cret.). Roadside near Potomac Run; Fred-
ericksburg; near Telegraph Station, Virginia.
3890. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 179, 180, pl. 79,
fig. 5; pl. 82, fig. 4; pl. 83, figs. 1, 2, 6, 7; pl. 84, figs. 1, 2, 8,
10, 14, 15; pl. 85, figs. 12, 16.

2540. **Podozamites distantinervis** Fontaine. Illustrated specimens.
2622. Neocomian or Jurassic? Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 165.
See *Podozamites latipennis* and *Zamites alaskana*.
8224. **Podozamites emmonsii** Newberry. Illustrated specimens.
8225. Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 297, pl. 42, figs. 1, 2.
30877. **Podozamites emmonsii** Fontaine. Illustrated specimen.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 77, pl. 33, fig. 2.
= *Podozamites longifolius*.
8360. **Podozamites grandifolius** Fontaine? Illustrated specimen.
(2437.) Jurassic? Cape Lisburne, Alaska.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 167, pl. 44, fig. 1.
See *Baiera palmata*.
2540. **Podozamites latipennis** Heer. Illustrated specimen.
Neocomian (Cret.). Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 31, pl. 16, figs. 2, 3.
= *Podozamites distantinervis*.
30877. **Podozamites longifolius** Emmons. Illustrated specimens.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 294.
See *Podozamites emmonsii*.
8222. **Podozamites longifolius** Emmons. Illustrated specimens.
8223. Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 294, pls. 40, 41.
603. **Podozamites oblongus** Lesquereux. Types.
604. Dakota (Cret.). North of Salina, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 28, pl. 1, figs. 10, 11.
3265. **Podozamites pedicellatus** Fontaine. Type.
3891. Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 180, pl. 76, fig. 1; pl. 78, fig. 7; pl. 82, fig. 5.
3263. **Podozamites subfalcatus** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 179, pl. 68, fig. 6; pl. 170, fig. 9.

30949. **Podozamites tenuistriatus** (Rogers) Fontaine. Illustrated specimen.
Triassic. Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 78, pl. 42, fig. 2.
3741. **Podozamites** sp.? Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 267, pl. 36, fig. 8.
3226. **Polypodium dentatum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 105, pl. 22, figs. 4, 5.
3452. **Polypodium fadyenioides** Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 104, pl. 16, figs. 4, 5.
625. **Populites cyclophylla** (Heer) Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 93; Rept. U. S.
Geol. Surv. Terr., VI, Pt. I, 1874, p. 59, pl. 24, fig. 4.
6895. **Populites cyclophylla** (Heer) Lesquereux. See *Populus*
6896. *cyclophylla*.
626. **Populites elegans** Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 93; Rept. U. S. Geol.
Surv. Terr., VI, Pt. I, 1874, p. 59, pl. 3, fig. 3.
2760. **Populites elegans** Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 47, pl. 46, fig. 5;
pl. 47, figs. 2, 3.
6927. **Populites elegans** Lesquereux. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 54, pl. 8, fig. 3.
6917. **Populites flabellata** Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Amer. Jour. Sci., XLVI, 1868, p. 94.
= *Grewiopsis flabellata*.
See *Grewiopsis haydenii*.
50135. **Populites hyperborea** Heer. Illustrated specimen.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 44, pl. 8, fig. 1.
627. **Populites lancastriensis** Lesquereux. Type.
Dakota (Cret.). Near Lancaster, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 58,
pl. 3, fig. 1.
See *Populus lancastriensis*.

624. **Populites litigosus** (Heer) Lesquereux. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, Nebraska.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 46.
See *Populus litigiosa*.
2770. **Populites litigosus** (Heer) Lesquereux. Illustrated specimens.
50118. Dakota (Cret.). Near Fort Harker, and ten miles north-
50139. east of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 46, pl. 7, fig. 7;
pl. 8, fig. 5; pl. 47, fig. 1.
633. **Populites ovata** Lesquereux. Type.
633b. Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci. (2), XLVI, 1868, p. 94.
= *Ampelophyllum ovatum*.
See *Celtis?* *ovata*.
- 645a. **Populites quadrangularis** Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Amer. Journ. Sci. (2), XLVI, 1868, p. 94.
= *Hamamelites quadrangularis*.
See *Alnites quadrangularis*.
- 690 **Populites salisburiaefolius** Lesquereux. Types.
to Dakota (Cret.). Lancaster County, Nebraska.
692. Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 94.
= *Cissites salisburiaefolius*.
See *Sassafras obtusum*.
3390. **Populophyllum crassinerve** Fontaine. Type.
Potomac (Low. Cret.). Deep Bottom, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 312, pl. 158, fig. 4.
3440. **Populophyllum hederæforme** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 311, pl. 166, fig. 3.
3403. **Populophyllum reniforme** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 311, pl. 155, fig. 9;
pl. 156, fig. 3.
224. **Populus acerifolia** Newberry. Types.
225. Fort Union (Tert.). Fort Union, North Dakota.
551. Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 65; U. S. Geol.
552. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 13, figs. 5-8;
6968. Mon. XXXV, U. S. Geol. Surv., 1898, p. 37, pl. 28, figs. 5-8.
4051. **Populus amblyrhyncha** Ward. Types.
4060. Fort Union (Tert.). Seven Mile Creek, below Glendive,
5362. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 20, pl. 6, figs. 2, 5, 7.

4086. **Populus anomala** Ward. Type.
Fort Union (Tert.). Burns's Ranch, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 23, pl. 8, fig. 7.
208. **Populus arctica** Heer. Illustrated specimens.
210 Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rep. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 178,
pl. 23, figs. 3, 5.
- 212 **Populus arctica** Heer. See *Populus decipiens*.
to
216.
5389. **Populus auriculata** Ward. Type.
Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 356, pl. 4,
fig. 4.
4403. **Populus balsamoides** Goeppert. Illustrated specimen.
Miocene (Tert.). Cliff west of Fossil Forest Ridge, Yel-
lowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 696,
pl. 86, fig. 1.
579. **Populus cordata** Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 60; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 14, fig. 6;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 38, pl. 29, fig. 6.
623. **Populus(?) cordifolia** Newberry. Type.
6894. Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 18; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 3, fig. 7; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 40, pl. 3, fig. 7.
4087. **Populus craspedodroma** Ward. Type.
Fort Union (Tert.). Burns's Ranch, below Glendive, Mon-
tana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 21, pl. 8, fig. 3.
223. **Populus cuneata** Newberry. Types.
6981. Fort Union (Tert.). Yellowstone River, Montana, or Fort
6982. Union, Buford County, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 64; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 41, pl. 28, figs. 2, 3.
See *Populus nervosa elongata*.
6997. **Populus cuneata** Newberry. Illustrated specimen.
Fort Union (Tert.). Tongue River, Custer County, Mon-
tana.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 41, pl. 29, fig. 7.
See *Populus nebrascensis*.

4061. **Populus cuneata** Newberry. Illustrated specimens.
 4065. Fort Union (Tert.). Clear Creek, fifteen miles above Glendive, Montana.
 4067. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 19, pl. 5, figs. 1, 2, 3.
- 4062 **Populus cuneata** Newberry. Illustrated specimens.
 to Fort Union (Tert.). Seven Mile Creek, below Glendive, Montana.
 4064. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 19, pl. 4, figs. 5-8.
 4066.
2023. **Populus cuneata** Newberry. Illustrated specimen.
 Fort Union (Tert.). Bad Lands, Dakota.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 225, pl. 46a, fig. 5.
- 226 **Populus cuneata** Newberry. Illustrated specimens.
 to Fort Union (Tert.). Yellowstone River, Montana, or Fort Union, Buford County, North Dakota.
 228.
 6970. Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 14, figs. 1-4.
 = *Populus rotundifolia*.
6895. **Populus cyclophylla** Heer. Types.
 6896. Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
 Heer, Proc. Acad. Nat. Sci. Phila., 1858, p. 266.—Newberry, U. S. Geol. Surv., Ills. Cret. and Tert. Plants, 1878, pl. 3, figs. 3, 4; Mon. XXXV, U. S. Geol. Surv., 1898, p. 41, pl. 3, figs. 3, 4.
 = *Populites cyclophylla*.
6916. **Populus cyclophylla** Heer. Illustrated specimen.
 Dakota (Cret.). Fort Harker, Kansas.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 41, pl. 4, fig. 1.
 = *Populites cyclophylla*.
 See *Populus litigiosa*.
- 4072 **Populus daphnogenoides** Ward. Types.
 to Fort Union (Tert.). Seven Mile Creek, below Glendive, Montana.
 4074. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 20, pl. 7, figs. 4-6.
4251. **Populus daphnogenoides** Ward. Illustrated specimens.
 4342. Fort Union (Tert.). Top of bluff, Yellowstone River, one-half mile below mouth of Elk Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 696, pl. 84, fig. 2.
- 624a. **Populus ? debeyana** Heer. Illustrated specimens.
 6897. Dakota (Cret.). Blackbird Hill, Nebraska.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 17; U. S. Geol. Surv., Ills. Cret. and Tert. Plants, 1878, pl. 5, fig. 7; Mon. XXXV, U. S. Geol. Surv., 1898, p. 42, pl. 5, fig. 7.
 See *Juglans? debeyana*.

- 212 **Populus decipiens** Lesquereux. Illustrated specimens.
to Laramie? (Cret.). Carbon, and Creston, Wyoming.
216. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 179,
pl. 23, figs. 7-11.
= *Populus arctica*.
621. **Populus elliptica** Newberry. Types.
622. Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 16; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 3, figs. 1, 2;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 43, pl. 3, figs. 1, 2.
- 8293 **Populus eotremuloides** Knowlton. Types.
to Payette, Miocene (Tert.). Two miles southeast of Marsh,
8296. Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 725, pl. 100, figs. 1, 2; pl. 101, figs. 1, 2.
6941. **Populus flabellum** Newberry. Type.
Puget Sound (Cret.). Chuckanut, Bellingham Bay, Wash-
ington.
Newberry, Boston Journ. Nat. Hist., VII, 1863, p. 524; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 44, pl. 20, fig. 4.
6996. **Populus genatrix** Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County, Mon-
tana.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 64; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 20, fig. 1;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 44, pl. 27, fig. 1.
2022. **Populus glandulifera** Heer. Illustrated specimen.
Fort Union (Tert.). Bad Lands, Dakota.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 226,
pl. 46a, figs. 3, 4.
- 4076 **Populus glandulifera** Heer. Illustrated specimens.
to Fort Union (Tert.). Burns's Ranch, below Glendive,
4079. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 19, pl. 4, figs. 1-4.
4343. **Populus glandulifera** Heer. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National
Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 694,
pl. 84, fig. 1.
4075. **Populus grewiopsis** Ward. Type.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 23, pl. 9, fig. 1.
2723. **Populus harkeriana** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 44, pl. 46, fig. 4.

4085. *Populus hederoides* Ward. Type.
Fort Union (Tert.). Seven Mile Creek, below Glendive
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 22, pl. 8, fig. 5.
1689. *Populus heerii* Saporta. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
1696. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
1707. p. 157, pl. 30, figs. 1-8; pl. 31, figs. 6, 11.
1712.
4083. *Populus inæqualis* Ward. Type.
Fort Union (Tert.). Burns's Ranch, below Glendive,
Montana. •
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 24, pl. 9, fig. 2.
627. *Populus lancastriensis* Lesquereux. Type.
Dakota (Cret.). Near Lancaster, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 93.
= *Populites lancastriensis*.
200. *Populus latior cordifolia* Heer. Illustrated specimen.
Laramie? (Cret.). Washakie Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv., VII, Pt. II, 1878, p. 172,
pl. 22, fig. 8.
8292. *Populus lindgreni* Knowlton. Type.
Payette, Miocene (Tert.). Two miles southeast of Marsh,
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 725, pl. 100, fig. 3.
8512. *Populus lindgreni* Knowlton. Illustrated specimen.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount
Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 29, pl. 2, fig. 1.
624. *Populus litigiosa* Heer. Illustrated specimen.
Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, U. S. Geol. Surv., Ills. Cret. and Tert. Plants, 1878, pl. 3,
fig. 6; Mon. XXXV, U. S. Geol. Surv., 1898, p. 45, pl. 3, fig. 6.
= *Populites litigiosus*.
6916. *Populus litigiosa* Heer. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Newberry, U. S. Geol. Surv., Ills. Cret. and Tert. Plants, 1878, pl. 4,
fig. 1.
= *Populites cyclophylla*.
3585. *Populus meedsii* Knowlton. Type.
Fort Union (Tert.). Glendive, Montana.
Knowlton, Proc. U. S. Nat. Mus., XVI, 1893, p. 34, pl. 1, figs. 1, 2.
205. *Populus melanaria* Heer. Illustrated specimen.
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 173,
pl. 64, fig. 5.

6892. **Populus microphylla** Newberry. Type.
Dakota (Cret.). Blackbird Hill, near Decatur, Nebraska.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 46, pl. 3, fig. 5.
217. **Populus monodon** Lesquereux. Types.
218. Laramie (Cret.). Raton Mountains, New Mexico.
Lesquereux, Ann. Rept. U. S. Geol. Surv., 1871, Suppl., 1873, p. 375,
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 180, pl. 24,
figs. 1, 2.
219. **Populus mutabilis ovalis** Heer. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr.; VII, Pt. II, 1878, p. 177,
pl. 24, fig. 3.
6997. **Populus nebrascensis** Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County,
Montana.
Newberry, U. S. Geol. Surv., Terr. Ills. Cret. and Tert. Plants, 1878,
pl. 14, fig. 7.
= *Populus cuneata*.
6974. **Populus nervosa** Newberry. Types.
6998. Fort Union, (Tert.). Fort Union, Buford County, North
Dakota, and Tongue River, Custer County, Montana.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 61; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 12, figs. 2, 3;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 48, pl. 27, fig. 2, 3.
223. **Populus nervosa elongata** Newberry. Types.
6981. Fort Union (Tert.). Yellowstone River, Montana, and
6982. Buford County, North Dakota.
6999. Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 62; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, pl. 13, figs. 1-3 (2,
3=*P. cuneata*); Mon. XXXV, U. S. Geol. Surv., 1898, p. 49,
pl. 28, fig. 1.
= *Populus cuneata* (part).
8297. **Populus occidentalis** Knowlton. Type.
Payette, Miocene (Tert.). Two miles southeast of Marsh,
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 727, pl. 99, fig. 14.
- 1684 **Populus oxyphylla** Saporta. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
1686. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 159,
pl. 38, figs. 9-11.
4080. **Populus oxyrhyncha** Ward. Type.
4081. Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 21, pl. 8, figs. 1, 2.
- 7053 **Populus polymorpha** Newberry. Types.
to Upper Eocene (Tert.). Bridge Creek, Crook County,
7056. Oregon.
7061. Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 50, pl. 49, figs. 8, 9;
pl. 58, fig. 4.

7049. **Populus polymorpha** Newberry. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 50, pl. 46, fig. 4.
= *Quercus oregoniana*.
7051. **Populus polymorpha** Newberry. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 50, pl. 49, fig. 7.
= *Quercus pseudo-alnus*.
7047. **Populus polymorpha** Newberry. Type.
7052. Upper Eocene (Tert.). Bridge Creek, Crook County,
7060. Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 50, pl. 46, fig. 3;
pl. 47, fig. 4; pl. 49, fig. 4.
= *Betula heteromorpha*.
- 5386 **Populus potomacensis** Ward. Types.
to Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
5388. Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 356, pl. 4,
figs. 1-3.
5253. **Populus? problematica** Knowlton. Type.
5254. Laramie (Cret.). Head of Fir Canyon, eight miles east of
Bozeman, Montana.
Knowlton, Bull. No. 105, U. S. Geol. Surv., 1894, p. 51, pl. 6
figs. 5, 6.
- 201 **Populus richardsoni** Heer. Illustrated specimens.
to Green River (Tert.). Elko Station, Nevada.
203. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 177,
pl. 22, figs. 10-12.
4082. **Populus richardsoni** Heer. Illustrated specimens.
Fort Union (Tert.). Burns's Ranch, below Glendive
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 23, pl. 8, fig. 6.
- 226 **Populus rotundifolia** Newberry. Types.
to Fort Union (Tert.). Fort Union, or mouth of the Yellow-
228. stone River, North Dakota.
6970. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 506; Mon. XXXV, U. S.
Geol. Surv., 1898, p. 51, pl. 29, figs. 1-4.
See *Populus cuneata*.
5231. **Populus russelli** Knowlton. Type.
Miocene? (Tert.). Ellensburg, Washington.
Knowlton, Bull. No. 108, U. S. Geol. Surv., 1893, p. 104.
229. **Populus smilacifolia** Newberry. Type.
Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 66; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, pl. 14, fig. 5; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 53, pl. 29, fig. 5.

- 4068 **Populus speciosa** Ward. Types.
to Fort Union (Tert.). Clear Creek, fifteen miles above Glen-
4071. dive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 20, pl. 5, figs. 4-7.
4250. **Populus speciosa** Ward. Illustrated specimens.
5125. Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 694,
pl. 84, fig. 3.
220. **Populus subrotundata** Lesquereux. Illustrated specimen.
221. Laramie? (Cret.). Rock Creek, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 173,
pl. 24, figs. 6, 8.
222. **Populus ungeri** Lesquereux. Type.
Denver? (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 175,
pl. 24, fig. 5.
4084. **Populus whitei** Ward. Type.
Fort Union (Tert.). Burns's Ranch, left bank Yellowstone
River, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 22, pl. 8, fig. 4.
4338. **Populus xantholithensis** Knowlton. Types.
4339. Fort Union (Tert.). Top of bluff, Yellowstone River, one-
half mile below mouth of Elk Creek, Yellowstone Na-
tional Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 695,
pl. 85, figs. 1, 2.
204. **Populus zaddachi** Heer. Illustrated specimens.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr. VII, Pt. II, 1878, p. 176,
pl. 22, fig. 13.
1687. **Populus zaddachi** Heer. Illustrated specimen.
Green River (Tert.) Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p.
158, pl. 31, fig. 8.
7578. **Populus zaddachi?** Heer. Illustrated specimen.
Miocene (Tert.) Left bank of the Columbia River, near the
mouth of Moffats Creek, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 40, pl. 1, fig. 11.
7647. **Populus** sp. Knowlton.
Montana (Cret.). North Fork Dutton Creek, Albany
County, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 37, pl. 7, fig. 5.

8515. **Porana bendirei** (Ward) Lesquereux. Type.
(2541.) Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 16, pl. 8, fig. 4.
= *Hydrangea bendirei*.
See *Marsilea bendirei*.
8564. **Potamogeton robbinsii** Oakes. Supplemental types.
8570 to 8573. Interglacial (Pleistocene). Morgantown, West Virginia.
Knowlton in I. C. White, Amer. Geol., XVIII, 1896, p. 371.
1625. **Potamogeton verticillatus** Lesquereux. Types.
1626. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 142,
pl. 23, fig. 5.
5399. **Preissites wardii** Knowlton. Types.
to 5401. Fort Union (Tert.) Burns's Ranch, below Glendive,
Montana.
Knowlton, Bull. Torrey Bot. Club, XXI, 1894, p. 458, pl. 219, figs.
1-3.
3196. **Proteæphyllum dentatum** Fontaine. Type.
Potomac (Low Cret.). Belt and Covington streets, Balti-
more, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 286, pl. 156, fig. 7;
pl. 172, figs. 1, 4; pl. 173, figs. 12, 14.
3267. **Proteæphyllum ellipticum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 285, 286, pl. 142,
figs. 1, 2.
3244. **Proteæphyllum oblongifolium** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 284, pl. 139, fig. 5;
pl. 140, figs. 1, 2.
3243. **Proteæphyllum orbiculare** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 283, pl. 139, fig. 4.
3258. **Proteæphyllum ovatum** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 285, pl. 141, fig. 1.
3291. **Proteæphyllum reniforme** Fontaine. Types.
3915. Potomac (Low. Cret.). Fredericksburg; 72d milepost,
3916. near Brooke; fishing hut above Dutch Gap Canal,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 282, 283, pl. 139,
fig. 3; pl. 156, fig. 4; pl. 160, figs. 1, 2.
5390. **Proteæphyllum reniforme** Fontaine. Illustrated specimens.
5391. Potomac (Low. Cret.). Near mouth of Doag Creek,
Mount Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 560, pl. 4,
figs. 5, 6.

3283. **Proteæphyllum tenuinerve** Fontaine. Types.
 3901. Potomac (Low. Cret.). Fishing hut above Dutch Gap
 3918. Canal; roadside near Potomac Run, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 286, pl. 150, fig. 13;
 pl. 156, fig. 2.
666. **Proteoides acuta** Heer. Illustrated specimen.
 Dakota (Cret.). Near Decatur, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 86,
 pl. 15, fig. 3.
665. **Proteoides daphnogenoides** Heer. Illustrated specimens.
 6900. Dakota (Cret.). Decatur, Nebraska.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 85,
 pl. 15, figs. 1, 2.
2778. **Proteoides lancifolius** Heer. Illustrated specimen.
 Dakota (Cret.). Near Fort Harker, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 90, pl. 50, fig. 8.
7007. **Protoficus inæqualis** Newberry. Type.
 Fort Union (Tert.). Tongue River, Custer County,
 Montana.
 Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 512; Mon. XXXV,
 U. S. Geol. Surv., 1898, p. 89, pl. 58, fig. 2.
5255. **Protophylocladus lanceolatus** (Knowlton) Berry. Type.
 Laramie (Cret.). Head of Fir Canyon, eight miles east of
 Bozeman, Montana.
 Berry, Bull. Torrey Bot. Club, XXX, 1903, p. 441.
 See *Thinnfeldia lanceolata*.
838. **Protophylocladus polymorphus** (Lesquereux) Berry. Type.
 Livingston and Montana (Cret.). Spring Canyon and Boze-
 man Coal Field, Montana.
 Berry, Bull. Torrey Bot. Club, XXX, 1903, p. 442.
 See *Salisburia polymorpha* and *Thinnfeldia montana*.
- 5256 **Protophylocladus polymorphus** (Lesquereux) Berry. See
 to *Thinnfeldia polymorpha*.
 5259.
590. **Protophylocladus subintegrifolius** (Lesquereux) Berry.
 50108 See *Thinnfeldia subintegrifolia* and *Phyllocladus subin-*
 to *tegrifolius*.
 50110.
50017. **Protephyllum crassum** Lesquereux. Type.
 Dakota (Cret.). Ellsworth County, Kansas.
 Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 193, pl. 65,
 fig. 4.
- 727 **Protephyllum crednerioides** Lesquereux.
 to Illustrated specimens.
 729. Dakota (Cret.). Fort Harker, Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 90,
 pl. 2, figs. 1-3.

50018. **Protophyllum crenatum** Knowlton. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Knowlton in Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 190,
pl. 65, fig. 7.
50063. **Protophyllum denticulatum** Lesquereux. Type.
Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 193, pl. 36, fig. 9.
2832. **Protophyllum haydenii** Lesquereux. Illustrated specimen.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 192, pls. 43, 44.
733. **Protophyllum leconteanum** Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 103,
pl. 26, fig. 1.
2785. **Protophyllum leconteanum** Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 187, pl. 40, fig. 1.
735. **Protophyllum minus** Lesquereux. Type.
Dakota (Cret.). Salina, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 104,
pl. 19, fig. 2.
6926. **Protophyllum minus** Lesquereux. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 132, pl. 9, fig. 3.
737. **Protophyllum minus** Lesquereux. Illustrated specimen.
Dakota (Cret.). Fort Larned, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 89,
pl. 4, fig. 6.
2852. **Protophyllum?** **mudgii** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 106,
pl. 18, fig. 3.
See *Quercus mudgii*.
2817. **Protophyllum multinerve** Lesquereux. Illustrated specimens.
50143. Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 191, pl. 43,
fig. 2; pl. 65, fig. 1.
2720. **Protophyllum præstans** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 188, pls. 41, 42.
3115. **Protophyllum pterospermifolium** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 195, pl. 59,
fig. 1.

731. **Protophyllum rugosum** Lesquereux. Illustrated specimens.
736. Dakota (Cret.). South of Fort Harker, and near Fort Larned, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 105, pl. 17, fig. 2, pl. 19, fig. 3.
730. **Protophyllum sternbergii** Lesquereux. Types.
732. Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 101, pl. 16; pl. 18, fig. 2.
See *Pterospermites sternbergii*.
6913. **Protophyllum sternbergii** Lesquereux. Illustrated specimens.
6914. Dakota (Cret.). Fort Harker, Kansas.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 133, pls. 10, 11.
- 8514a. **Prunus merriami** Knowlton. Types.
8514b. Mascall beds, Miocene (Tert.). Twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, pp. 67, 68, pl. 11, fig. 2.
- 7108 **Prunus variabilis** Newberry. Types.
to Eocene (Tert.). Cook Inlet, Alaska.
7110. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 509; Mon. XXXV U. S. Geol. Surv., 1898, p. 112, pl. 52, figs. 3-5.
8208. **Pseudodanæopsis plana** (Emmons) Fontaine. Type.
Triassic. Ellingtons, four miles from Lockville, Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 284.
See *Strangerites planus* and *Pseudodanæopsis reticulata*.
3488. **Pseudodanæopsis reticulata** Fontaine. Types.
30956 Triassic. Carbon Hill, Richmond Coal Field, Virginia.
to Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 59, pl. 30, figs. 1-4.
30959.
8208. **Pseudodanæopsis reticulata** Fontaine. Illustrated specimen.
Triassic. Ellingtons, four miles from Lockville, Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 116, pl. 54, fig. 3.
= *Pseudodanæopsis plana*.
See *Strangerites planus*.
13401. **Pseudopecteris anceps** Lesquereux. Illustrated specimens.
13403. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 7, pl. 38, fig. 3; Text, I, 1880, p. 207.

13733. **Pseudoplecteris andræana** (Roehl) Lesquereux.
 13734. Supplemental types.
 Kanawha, Pottsville (Penn.). Coalmont and Blacksburg,
 West Virginia.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 754.
15008. **Pseudoplecteris decipiens** Lesquereux.
 Illustrated specimen.
 Pottsville (Penn.). Helena, Alabama.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 9, pl. 52, fig. 10; Text, I, 1880, p. 214.
13565. **Pseudoplecteris dimorpha** Lesquereux.
 13566. Illustrated specimens.
 Anthracite (Penn.). Orchard mine, Plymouth, Pennsylv-
 ania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 750, pl. 98, figs. 4, 4a.
13737. **Pseudoplecteris hispida** Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 755, pl. 98, fig. 3.
13639. **Pseudoplecteris irregularis** (Sternberg) Lesquereux.
 Illustrated specimen.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 52, figs. 1, 2; Text, I, 1880, p. 211.
6433. **Pseudoplecteris macilenta** (Lindley and Hutton) Lesque-
 6434. reux. Illustrated specimens.
 McAlester (Penn.). One-half mile west of McAlester,
 Indian Territory.
 White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899, p.
 472, pl. 67, figs. 10, 11.
14807. **Pseudoplecteris macilenta** (Lindley and Hutton) Lesque-
 reux. Illustrated specimen.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 219; III, 1884, p. 754, pl. 98, fig. 2.
13902. **Pseudoplecteris mazoniana** Lesquereux. Type.
 Allegheny (Penn.). Mazon Creek, Grundy County, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 32, fig. 1; Text, I, 1880, p. 190.
14776. **Pseudoplecteris nummularia** Gutbier.
 14886. Illustrated specimens.
 14891. Pottsville (Penn.). Cannelton and Campbells Ledge,
 Pittston, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 751, pl. 103, figs. 1, 1a, 2, 2a.

5627. **Pseudoplecteris obtusiloba** (Brongniart) Lesquereux. Illustrated specimens.
 5635. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry
 5717. County, Missouri.
 5718. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 24, pl. 7, figs. 1-3;
 pl. 8.
13607. **Pseudoplecteris obtusiloba** (Brongniart) Lesquereux. Supplemental type.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P'
 Text, III, 1884, pp. 753, 754.
13618. **Pseudoplecteris obtusiloba dilatata** (Lindley and Hutton) Lesquereux. Supplemental type.
 Pottsville (Penn.). Wyoming Mine, near Upper Creek,
 Kanawha County, West Virginia.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 753.
13547. **Pseudoplecteris pluckneti** (Schlotheim) Lesquereux. Illustrated specimens.
 13548. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 6, pl. 35, figs. 7, 7a; Text, I, 1880, p. 199.
13508. **Pseudoplecteris sillimanni** (Brongniart) Lesquereux. Illustrated specimen.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 37, fig. 3; Text, I, 1880, p. 206.
13531. **Pseudoplecteris sphenopteroides** Lesquereux. Types.
 13532. Allegheny (Penn.). Mazon Creek, Grundy County, Illinois.
 Cherokee (Penn.). Clinton, Henry County, Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 21, figs. 3, 4; Text, I, 1880, p. 139.
5618. **Pseudoplecteris** sp. David White.
 5667. Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
 County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 29, pl. 7, figs. 4, 5.
5402. **Psilophyton grandis** Penhallow. Types.
 5403. Hamilton, Erian (Dev.). West Hurley, Ulster County,
 5408. New York.
 Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 111, pl. 12, fig. 12a;
 pl. 13, fig. 12b; pl. 14, fig. 12c.
46. **Psilotum inerme** Newberry. Types.
 47. Fort Union (Tert.). Fort Union, North Dakota.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 38; U. S. Geol.
 Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 7, fig. 2; pl. 8,
 fig. 3.
 = *Cabomba inermis*.

979. **Ptenostrobus nebrascensis** Lesquereux. Type.
Dakota (Cret.). Bluffs of the Missouri River, eight miles
northeast of Winnebago Village, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 114,
pl. 24, fig. 1.
50078. **Pteris dakotensis** Lesquereux. Types.
50079. Dakota (Cret.). Cloud County, ten miles northeast of
Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 24, pl. 1, figs. 2, 3.
23. **Pteris erosa** Lesquereux. Illustrated specimen.
Denver? (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 53,
pl. 4, fig. 8.
= *Asplenium erosum*.
17. **Pteris gardneri** Lesquereux. Type.
Arapahoe (Cret.). Sand Creek, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1873 [1874], p. 393.
= *Gymnogramma gardneri*.
589. **Pteris nebraskana?** Heer. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 46,
pl. 29, fig. 5.
7098. **Pteris pennæformis** Heer. Illustrated specimen.
Eocene? (Tert.). Currant Creek, Oregon.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 7, pl. 48, fig. 5.
18. **Pteris pseudopennæformis** Lesquereux. Illustrated specimen.
Denver (Cret.). Henrys Forks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 52,
pl. 4, fig. 3.
6962. **Pteris russelli** Newberry. Type.
Laramie (Cret.). Vermejo Canyon, Colfax County, New
Mexico.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 503; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 7, pl. 61, fig. 1.
- 20 **Pteris subsimplex** Lesquereux. Illustrated specimens.
to Denver (Cret.). Golden, Colorado.
22. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 52,
pl. 4, figs. 5, 6, 7.
= *Asplenium subsimplex*.
476. **Pterocarya americana** Lesquereux. Type.
Green River (Tert.). Middle Park? Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873,
[1874], p. 417; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 290, pl. 58, fig. 3.

30884. **Pterophyllum affine** Nathorst. Illustrated specimen.
Triassic. Midlothian, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 66, pl. 32, fig. 3.
8216. **Pterophyllum daleanum** Ward. Type.
Triassic. Lockville, Chatham County, North Carolina.
Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 290.
See *Pterophyllum pectinatum* and *Pterozamites pectinatus*.
8217. **Pterophyllum decussatum** (Emmons) Fontaine. Type.
Triassic. Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 111, pl. 51, fig. 2.
= *Ctenophyllum braunianum angustum*.
See *Pterozamites decussatus*.
592. **Pterophyllum haydenii** Lesquereux. Types.
598. Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Amer. Jour. Sci., XLVI, 1868, p. 91.
592 = *Pterophyllum?* *haydenii*.
598 = *Abietites ernestinæ*.
592. **Pterophyllum?** *haydenii* Lesquereux. Type.
Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 49,
pl. 1, fig. 6.
3499. **Pterophyllum inæquale** Fontaine. Types.
30976. Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 64, pl. 36, fig. 1.
8216. **Pterophyllum pectinatum** Fontaine. Type.
Triassic. Lockville, Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 112, pl. 53, fig. 4.
= *Pterophyllum daleanum*.
See *Pterozamites pectinatus*.
8221. **Pterophyllum robustum** Emmons. Type.
Triassic. Ellingtons, four miles from Lockville, Chatham
County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 122, fig. 91.
= *Ctenophyllum robustum*.
8219. **Pterophyllum spatulatum** (Emmons) Fontaine. Type.
Triassic. Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 114, pl. 53, fig. 6.
= *Ctenophyllum braunianum angustum*.
30081. **Pterospermites alaskana** Knowlton. Types.
30089. Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 156, pl. 26, fig. 2;
pl. 32.

4201. **Pterospermites cordatus** Ward. Type.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 93, pl. 41, fig. 4.
577. **Pterospermites cupanioides** (Newberry) Knowlton. See
Phyllites cupanioides and P. venosus.
4205. **Pterospermites cupanioides** (Newberry) Knowlton. See
5343. Pterospermites whitei.
3580. **Pterospermites cupanioides** (Newberry) Knowlton. Illustrated specimen.
Fort Union (Tert.). Glendive, Montana.
Knowlton, Proc. U. S. Nat. Mus., XVI, 1893, p. 35, pl. 2, fig. 1.
7122. **Pterospermites dentatus** Heer. Illustrated specimens.
7123. Eocene? (Tert.). Yukon River, Alaska.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 133, pl. 53,
figs. 1, 2.
4370. **Pterospermites haguei** Knowlton. Type.
Miocene (Tert.). Fossil Forest Ridge, upper stratum,
Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 742, pl.
99, fig. 4.
2742. **Pterospermites longaeacuminatus** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 186, pl. 59, fig. 3.
30088. **Pterospermites magnifolia** Knowlton. Type.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 156, pl. 31.
4202. **Pterospermites minor** Ward. Types.
to Fort Union (Tert.). Burns's Ranch, Montana.
4204. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 95, pl. 42, figs. 1-3.
2813. **Pterospermites modestus** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 186, pl. 58,
fig. 5.
730. **Pterospermites sternbergii** Lesquereux. Types.
732. Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 425.
= *Protophyllum sternbergii*.
4205. **Pterospermites whitei** Ward. Type.
5343. Fort Union (Tert.). Burn's Ranch, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 94, pl. 41, figs. 5, 6.
= *Pterospermites cupanioides*.

8217. **Pterozamites decussatus** Emmons. Type.
Triassic. Ellingtons, four miles from Lockville, Chatham
County, North Carolina.
Emmons, Geol. Rept. Midland Counties North Carolina, 1856, p. 330,
pl. 3, fig. 1; Amer. Geology, VI, 1857, p. 117, pl. 3, fig. 1.
= *Ctenophyllum braunianum angustum*.
See *Pterophyllum decussatum*.
8220. **Pterozamites linearis** Emmons. Type.
Triassic. House's quarry, Haw River, Chatham County,
North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 120, fig. 87.
= *Ctenophyllum lineare*.
8216. **Pterozamites pectinatus** Emmons. Type.
Triassic. Lockville, Chatham County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 117, fig. 84.
= *Pterophyllum daleanum*.
See *Pterophyllum pectinatum*.
8219. **Pterozamites spatulatus** Emmons. Types.
Triassic. House's quarry, Haw River, Chatham County,
North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 120, fig. 88.
= *Ctenophyllum braunianum angustum*.
19281. **Ptilophyton lineare** (Lesquereux) Dawson.
19282. Illustrated specimen.
Mississippian. Rushville, Ohio.
Dawson, Erian and Upp. Sil. Plants, Pt. II, 1882, p. 123, pl. 1 (?),
fig. 5.
30874. **Quercinium lamarense** Knowlton. Type.
Miocene (Tert.). Specimen Ridge, Yellowstone National
Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 771,
pl. 118, fig. 5; pl. 120, fig. 2; pl. 121, figs. 1, 2.
3458. **Quercophyllum grossedentatum** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 307, pl. 156, fig. 9.
3409. **Quercophyllum tenuinerve** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 308, pl. 149, figs. 6, 7.
7376. **Quercophyllum wyomingense** Fontaine. Type.
Lakota (Low. Cret.). Cliff on north side Pine Creek, two
miles west of Mrs. Dorsett's Ranch, Crook County,
Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 688, pl. 169, fig. 6.

178. *Quercus acrodon* Lesquereux. Type.
Montana (Cret.). Near Rock Creek, Laramie Plains,
Wyoming.
Lesquereux, Amer. Journ. Sci. (2), XLV, 1868, p. 205; Rept. U. S.
Geol. Surv. Terr., VII, Pt. II, 1878, p. 158, pl. 19, fig. 13.
= *Quercus lesquereuxiana*.
7125. *Quercus affinis* (Newberry) Knowlton. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 45.
See *Fraxinus affinis*.
617. *Quercus anceps* Lesquereux. Type.
Dakota (Cret.). Salt Creek, ten miles below Lancaster,
Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 96.
= *Diospyros ambigua*.
See *Diospyros anceps*.
191. *Quercus angustiloba* Al. Braun. Illustrated specimens.
192. Laramie (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 161,
pl. 21, figs. 4, 5.
7596. *Quercus applegatei* Knowlton. Types.
7597. Miocene (Tert.). Three miles southeast of Ashland,
Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 42, pl. 1, figs. 6, 7.
4131. *Quercus aquamara* (Ward) Knowlton. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 189.
See *Hedera aquamara*.
7702. *Quercus argentum* Knowlton. Type.
Esmeralda (Neocene). 4.5 kilometers northeast of Emi-
grant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 215, pl. 30, fig. 12.
186. *Quercus attenuata* (Goeppert) Lesquereux. Supplemental type.
Arapahoe (Cret.). Sand Creek, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 398.
= *Quercus viburnifolia*.
6947. *Quercus banksiæfolia* Newberry. Type.
to Puget Sound (Cret.). Chuckanut, Bellingham Bay, Wash-
6949. ington.
Newberry, Boston Journ. Nat. Hist., VII, 1863, p. 522; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 69, pl. 18, figs. 2, 3, 5.

4129. **Quercus bicornis** Ward. Type.
Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 24, pl. 9, fig. 3.
7598. **Quercus breweri** Lesquereux. Illustrated specimen.
Miocene (Tert.). Three miles southeast of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 42, pl. 2, fig. 3.
4130. **Quercus carbonensis** Ward. Type.
Laramie? (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 25, pl. 9, fig. 6.
4122. **Quercus carbonensis** Ward. See *Dryophyllum basidentatum*.
1575. **Quercus castaneopsis** Lesquereux. Type.
Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 155,
pl. 28, fig. 10.
7044. **Quercus castanioides** Newberry. Type.
Green River (Tert.). Green River, Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 506; Mon. XXXV, U. S.
Geol. Surv., 1898, p. 70, pl. 65, fig. 6.
6992. **Quercus castanopsis** Newberry. Type.
Fort Union (Tert.). Yellowstone River (Dawson County?),
Montana.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 505; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 71, pl. 56, fig. 4.
190. **Quercus chlorophylla** Unger. Illustrated specimen.
Laramie? (Cret.). Spring (Rocky) Canyon, near Fort Ellis,
Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 151,
pl. 21, fig. 3.
= *Quercus* ? *chlorophylloides*.
See *Quercus eucalyptifolia*.
190. **Quercus** ? *chlorophylloides* Knowlton. Type.
Laramie (Cret.). Spring Canyon, near Fort Ellis, Montana.
Knowlton, Bull. 152, U. S. Geol. Surv., 1898, p. 190.
See *Quercus chlorophylla* and *Quercus eucalyptifolia*.
180. **Quercus cleburni** Lesquereux. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 154,
pl. 20, fig. 2.
7048. **Quercus consimilis** Newberry. Types.
7050. Miocene (Tert.). Bridge Creek, Crook County, Oregon.
7057. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 505; Mon. XXXV,
7058. U. S. Geol. Surv., 1898, p. 71, pl. 43, figs. 3, 4, 7, 8; pl. 44, fig. 2.
7063.
7070.

8305. *Quercus consimilis* Newberry. Illustrated specimen.
Payette (Miocene). Two miles southeast of Marsh, Boise
County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 729, pl. 102, fig. 6.
5065. *Quercus consimilis?* Newberry. Illustrated specimen.
Fort Union (Tert.). Yellowstone River, one-half mile
below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 704,
• pl. 87, fig. 6.
- 6944 *Quercus coriacea* Newberry. Types.
to Puget Sound (Cret.). Chuckanut, Bellingham Bay, Wash-
6946. ington.
Newberry, Boston Journ. Nat. Hist., VII, 1863, p. 521; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 73, pl. 19, figs. 1-3.
2329. *Quercus crossii* Lesquereux. Type.
Denver? (Cret.). Silver Cliff, Colorado.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 39, pl. 2, figs. 5, 6.
4381. *Quercus culveri* Knowlton. Type.
Fort Union (Tert.). Top of bluff, Yellowstone River, one-
half mile below mouth of Elk Creek, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 708,
pl. 87, fig. 5.
4128. *Quercus doljensis* Pilar. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 25, pl. 9, fig. 4.
See *Rhus pseudo-meriani*.
177. *Quercus drymeja* Unger. Illustrated specimen.
Green River (Tert.). Costello's Ranch, near Florissant,
Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 157,
pl. 19, fig. 14.
1572. *Quercus drymeja* Unger. Illustrated specimens.
1573. Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 154,
pl. 28, fig. 12.
7006. *Quercus dubia* Newberry. Type.
Fort Union (Tert.). Tongue River, Custer County,
Montana.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 73, pl. 37, fig. 5.
See *Phyllites cupanioides*.
8508. *Quercus duriuscula* Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount
Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 50, pl. 8, fig. 2.

1677. *Quercus elæna* Unger. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 155,
pl. 28, fig. 13.
168. *Quercus elkoana* Lesquereux. Type.
Green River (Tert.). Elko Station, Nevada.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 413.
= *Carpinus grandis*.
6950. *Quercus elliptica* Newberry. Types.
6951. Puget Sound (Cret.). Chuckanut, Bellingham Bay, Wash-
ington.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 74, pl. 18,
figs. 1, 3.
183. *Quercus ellisiana* Lesquereux. See *Quercus pealei*.
181. *Quercus ellisiana* Lesquereux. Illustrated specimens.
182. Livingston (Cret.). Six miles above Spring Canyon, near
184. Fort Ellis, Montana.
185. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 155,
pl. 20, figs. 4, 5, 7, 8.
5200. *Quercus ellisiana* Lesquereux. Illustrated specimen.
Laramie (Cret.). Mount Evarts, Yellowstone National
Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 659,
pl. 77, fig. 6.
1175. *Quercus? ellsworthianus* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 65,
pl. 6, fig. 7.
50136. *Quercus? ellsworthianus* Lesquereux. See *Laurophyllum*
ellsworthianum.
190. *Quercus eucalyptifolia* Ettingshausen. Type.
Livingston (Cret.). Spring Canyon, near Fort Ellis, Mon-
tana.
Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad.
der Wissensch., LXVII, 1883, p. 16; Mem. Geol. Surv. N. S. W.,
Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 26.
= *Quercus? chlorophylloides*.
See *Quercus chlorophylla*.
893. *Quercus? fraxinifolia* Lesquereux. Type.
Livingston (Cret.). Spring Canyon, near Fort Ellis, Mon-
tana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 154,
pl. 20, fig. 3.

4373. *Quercus furcinervis americana* Knowlton. Illustrated specimens.
5171. Miocene (Tert.). Fossil Forest, Bed No. 5, Yellowstone
5217. National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 705,
pl. 88, fig. 5.
179. *Quercus godeti?* Heer. Illustrated specimen.
Livingston (Cret.). Six miles above Spring Canyon, near
Fort Ellis, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 153,
pl. 20, fig. 1.
6952. *Quercus gracilis* Newberry. Type.
Montana (Cret.). Point of Rocks, Sweetwater County,
Wyoming.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 504; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 75, pl. 67, fig. 4.
7103. *Quercus groenlandica* Heer. Illustrated specimen.
7104. Eocene (Tert.). Cook Inlet, Alaska.
7107. Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 75, pl. 51, fig. 3;
pl. 54, figs. 1, 2.
4361. *Quercus grossidentata* Knowlton. Types.
5165. Miocene (Tert.). Bed No. 5, Fossil Forest Ridge, Yellow-
5166. stone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 704,
pl. 87, fig. 7.
187. *Quercus haidingeri* Ettingshausen. Illustrated specimens.
188. Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 156,
pl. 20, figs. 9, 10.
175. *Quercus haydeni* Lesquereux. Type.
Laramie? (Cret.). Rock Creek, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 157,
pl. 19, fig. 10.
618. *Quercus hexagona* Lesquereux. Type.
Dakota (Cret.). Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 95; Rept. U. S. Geol.
Surv. Terr., VI, Pt. I, 1874, p. 64, pl. 5, fig. 8.
50084. *Quercus hexagona* Lesquereux. Illustrated specimen.
Dakota (Cret.). Delphos, Ottawa County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 56, pl. 7, fig. 5.
616. *Quercus holmesii* Lesquereux. See *Dryophyllum* (*Quercus*)
holmesii and *Dryophyllum* (*Quercus*) *salicifolium*.
8504. *Quercus horniana* Lesquereux. Type.
(2556.) Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Grant County, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 17.—Knowlton, Bull.
No. 204, U. S. Geol. Surv., 1902, p. 52, pl. 8, fig. 1.

50086. *Quercus (Dryophyllum) hosiana* Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 57, pl. 3, fig. 14.
8306. *Quercus idahoensis* Knowlton. Type.
Payette, Miocene (Tert.) Two miles southeast of Marsh,
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 729, pl. 102, fig. 4.
- 403 *Quercus ilicoides* ? (Heer) Lesquereux. Supplemental types.
to Green River (Tert.) Sage Creek, Montana.
405. Lesquereux, Ann. Rept. U. S. Geol. Surv. Montana, etc., 1871
[1872], p. 291.
= *Ilex dissimilis*.
2328. *Quercus imbricaria fossilis* Lesquereux. Type.
Pleistocene. Bridgeton, New Jersey.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 39.
645. *Quercus kanseana* (Lesquereux) Knowlton.
698. Type and illustrated specimen.
Dakota (Cret.). Fort Harker and western Kansas.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 194.
See *Alnus kanseanus* and *Hamamelites kanseana*.
613. *Quercus (Dryophyllum) latifolia* Lesquereux. Type.
Dakota (Cret.). Salina, Kansas.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
[1876], p. 340, pl. 6, fig. 1; Rept. U. S. Geol. Surv. Terr., VIII,
Pt. III, 1883, p. 37, pl. 4, fig. 1 (as *Dryophyllum (Quercus)*
latifolium); Mon. XVII, U. S. Geol. Surv., 1892, p. 58.
614. *Quercus (Dryophyllum) latifolia*. See *Dryophyllum lati-*
folium.
6967. *Quercus laurifolia* Newberry. Type.
Fort Union (Tert.). Fort Berthold, Garfield County,
North Dakota.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 505; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 76, pl. 60, fig. 3.
178. *Quercus lesquereuxiana* Knowlton. Type.
Montana (Cret.). Near Rock Creek, Laramie Plains,
Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 194.
See *Quercus acrodon*.
7667. *Quercus lesquereuxiana* Knowlton. Illustrated specimen.
Montana (Cret.). Dunn's Ranch, six miles east of Harpers
Station, Wyoming.
Knowlton, Bull. No. 163, 1900, p. 39, pl. 7, fig. 1.

4376. *Quercus? magnifolia* Knowlton. Type.
Fort Union (Tert.). Top of bluff, Yellowstone River, one-half mile below mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 704, pl. 88, fig. 1.
1679. *Quercus mediterranea* Unger. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 153, pl. 28, fig. 9.
- 8505 *Quercus merriami* Knowlton. Types.
to Mascal beds, Miocene (Tert.). Van Horn's Ranch, John
8507. Day Valley, and twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 49, pl. 6, fig. 7; pl. 7, figs. 4, 5.
2852. *Quercus mudgii* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Montana, etc., 1871 [1872], p. 302.
= *Protophyllum? mudgii*.
189. *Quercus negundooides* Lesquereux. Type.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 292; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 161, pl. 21, fig. 2.
171. *Quercus neriifolia* Al. Braun. Illustrated specimen.
Laramie (Cret.). Raton Mountains, New Mexico.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 150, pl. 19, fig. 5.
= *Apocynophyllum lesquereuxii*.
172. *Quercus neriifolia* Al. Braun. Illustrated specimen.
Green River (Tert.). Near Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 150, pl. 19, fig. 4.
= *Apocynophyllum pealei*.
1574. *Quercus neriifolia* Al. Braun. Illustrated specimen.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 155, pl. 31, fig. 12.
7049. *Quercus oregoniana* Knowlton. Types.
8484. Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 47, pl. 6, figs. 2, 3.
See *Populus polymorpha*.

7570. *Quercus pacifica* Knowlton. Types.
7571. Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 43, pl. 1, figs. 9, 10.
7059. *Quercus paucidentata* Newberry. Type.
Miocene (Tert.). Bridge Creek, Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 505; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 76, pl. 43, fig. 1.
8307. *Quercus payettensis* Knowlton. Type.
Payette (Miocene). Jackass Creek, Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 730, pl. 102, fig. 9.
183. *Quercus pealei* Lesquereux. Type.
Livingston (Cret.). Six miles above Spring Canyon, Gal-
latin County, Montana.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr. 1871 [1872], p. 297;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 156, pl. 20,
fig. 6.
= *Quercus ellisiana*.
193. *Quercus platania* (Heer) Lesquereux. Illustrated specimen.
Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 160,
pl. 21, fig. 1.
= *Platanus cordata*.
377. *Quercus platania rotundifolia* Lesquereux. Types.
378. Livingston (Cret.). Above Spring Canyon, near Fort
Ellis, Montana.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 405.
= *Dombeyopsis platanoides*.
615. *Quercus primordialis* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Amer. Journ. Sci. XLVI, 1868, p. 95; Rept. U. S.
Geol. Surv. Terr., VI, Pt. I, 1874, p. 64, pl. 5, fig. 7.
= See *Dryophyllum primordiale*.
7051. *Quercus pseudo-alnus* Ettingshausen. Supplemental type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 46.
See *Populus polymorpha*.
2565. *Quercus pseudo-lyrata* Lesquereux. Illustrated specimen.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 17, pl. 10, fig. 1.

- 2566 **Quercus pseudo-lyrata** Lesquereux. Illustrated specimens.
to Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
2570. Day Valley, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 48.
See *Quercus pseudo-lyrata* vars. *acutiloba*, *brevifolia*,
obtusiloba, and *latifolia*.
2566. **Quercus pseudo-lyrata acutiloba** Lesquereux. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 17, pl. 11, fig. 1.
=*Quercus pseudo-lyrata*.
2567. **Quercus pseudo-lyrata angustiloba** Lesquereux. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 7, pl. 11, fig. 2.
=*Quercus pseudo-lyrata*.
2568. **Quercus pseudo-lyrata brevifolia** Lesquereux. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 18, pl. 10, fig. 2.
=*Quercus pseudo-lyrata*.
2570. **Quercus pseudo-lyrata latifolia** Lesquereux. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 18, pl. 12, fig. 1.
=*Quercus pseudo-lyrata*.
2569. **Quercus pseudo-lyrata obtusiloba** Lesquereux. Type.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
Day Valley, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 18, pl. 10, fig. 3.
=*Quercus pseudo-lyrata*.
2571. **Quercus saffordii** Lesquereux. Illustrated specimen.
Eocene (Tert.). Wickliffe, Ballard County, Kentucky.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 13, pl. 5, figs. 1-3.
- 7058a. **Quercus simplex** Newberry. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County,
Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1886, p. 505; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 78, pl. 43, fig. 6.
- 8301 **Quercus simulata** Knowlton. Types.
to Payette, Miocene (Tert.). Two miles southeast of Marsh
8304. Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 728, pl. 101, figs. 3, 4; pl. 102, figs. 1, 2.

50083. **Quercus spurio-ilex** Knowlton. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Knowlton in Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892,
p. 53, pl. 48, fig. 3.
173. **Quercus stramineus** Lesquereux. Types.
174. Laramie (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 151,
pl. 19, figs. 6, 7.
7575. **Quercus subsinuata** Knowlton. Type.
Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 41, pl. 2, fig. 5.
6966. **Quercus sullyii** Newberry. Type.
Fort Union (Tert.). Fort Berthold, Garfield County,
North Dakota.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 506; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 79, pl. 60, fig. 2.
2757. **Quercus suspecta** Lesquereux. Types.
50080. Dakota (Cret.). Ellsworth County, and near Fort Harker,
50081. Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 52, pl. 47, fig. 7;
pl. 48, figs. 1, 2.
890. **Quercus triangularis** Goepfert. Supplemental type.
Laramie (Cret.). Golden, Colorado.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873,]
p. 377.
= *Quercus viburnifolia*.
7675. **Quercus turneri** Knowlton. Type.
Esmeralda (Neocene). 4.5 kilometers northeast of Emi-
grant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 214, pl. 30, fig. 21.
8509. **Quercus ursina** Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 51, pl. 7, fig. 3.
186. **Quercus viburnifolia** Lesquereux. Types.
890. Laramie (Cret.). Sand Creek and Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 159,
pl. 20, figs. 11, 12.
See *Quercus attenuata* and *Quercus triangularis*.
50082. **Quercus wardiana** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 53, pl. 7, fig. 1.

5999. **Quercus wardiana** ? Lesquereux. Illustrated specimens.
6005. Dakota (Cret.). Evans's quarry on Minnekahta Creek,
four miles below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 704,
pl. 170, figs. 2, 3.
4281. **Quercus weedii** Knowlton. Types.
4402. Miocene (Tert.). Fossil Forest Ridge, Bed No. 6, Yellow-
stone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 705,
pl. 87, fig. 4.
4374. **Quercus yanceyi** Knowlton. Type.
Miocene (Tert.). Mountain back of Yancey's, Fossil For-
est Station, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 707,
pl. 89, fig. 2.
7580. **Quercus** ? sp. Knowlton.
Miocene (Tert.). One mile east of Murphy's Springs,
southeast of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 41, pl. 1, fig. 8.
8555. **Quercus** sp. Knowlton.
Clarno beds, Eocene (Tert.). Road crossing Cherry Creek,
Crook County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 43, pl. 8, fig. 4.
- 19608 **Rachiopteris squamosa** Lesquereux. Types.
to Allegheny (Penn.). Cannelton, Pennsylvania.
19610. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, pp. 838, 839.
30790. **Retiphycus hexagonale** Ulrich. Type.
Yakutat series (Lias). Pogibshi Island, opposite Kadiak,
Alaska.
Ulrich, Harriman Alaska Exped., IV, 1904, p. 139, pl. 18, fig. 5.
26370. **Rhabdocarpos abnormalis** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv., Pa., Rept. Prog. P,
Text, III, 1884, p. 818, pl. 110, figs. 48, 49.
26630. **Rhabdocarpos amygdalæformis** Gœppert and Berger. Illustrated specimen.
Pottsville (Penn.). Campbells Ledge, Pittston, Pennsyl-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 85, fig. 27; Text, II, 1880, p. 581.
26756. **Rhabdocarpos apiculatus** Lesquereux. Type.
Anthracite (Penn.). Stanton Mine, Wilkesbarre, Penn-
sylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 819, pl. 110, fig. 50.

26368. **Rhabdocarpus arcuatus** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, p. 583.
26297. **Rhabdocarpus bockschianus** Goeppert and Berger. Supplemental type.
Walden (Penn.). Rockwood, Tennessee.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, pp. 844, 845.
26268. **Rhabdocarpus clavatus** (Sternberg) Geinitz. Illustrated specimen.
Pottsville (Penn.). Helena, Alabama.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, fig. 20; Text, II, 1880, p. 581.
= *Trigonocarpum helenæ*.
26568. **Rhabdocarpus coronatus** (Lesquereux Mss.) David White. Type.
Le Roy (Penn.). Ottawa, Kansas.
David White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 109.
26136. **Rhabdocarpus danai** Foster. Supplemental type.
Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, p. 580.
26116. **Rhabdocarpus inflatus** Lesquereux. Type.
26117. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 815, pl. 110, fig. 36.
26028. **Rhabdocarpus jacksonianum** Lesquereux. Illustrated specimens.
26029. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesley, Dictionary Foss. Plants Pa., Geol. Surv. Pa., P 4, II, 1889,
p. 867.
25830. **Rhabdocarpus laticostatus** Lesquereux. Types.
to Pottsville (Penn.). Campbell's Ledge, Pittston, Pennsylv-
25832. vania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 815, pl. 110, figs. 34, 35.
26762. **Rhabdocarpus mamillatus** Lesquereux. Types.
to Pennsylvanian. Stark County, Illinois.
26765. Lesquereux, Geol. Rept. Ill., IV, 1870, p. 461, pl. 31, figs. 12-15;
Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III,
1884, p. 816, pl. 110, figs. 39-42.
20122. **Rhabdocarpus multistriatus** (Presl) Lesquereux. Illustrated specimen.
Pottsville? (Penn.?) Rock Island, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, p. 578, pl. 85, fig. 23.

26796. **Rhabdocarpus pachytesta** Lesquereux. Types.
 26798. Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 816, pl. 110, figs. 37, 38.
26330. **Rhabdocarpus subglobosus** Lesquereux. Types.
 26331. Anthracite (Penn.). Butler dam, near Pittston, Pennsylv-
 vania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 817, pl. 110, figs. 43-45, 62.
26458. **Rhabdocarpus tenax** Lesquereux. Types.
 26459. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, pl. III, figs. 25, 26.
- 26362 **Rhabdocarpus** sp. Lesquereux.
 to Pottsville (Penn.). Pratt mines and Dolomite, Alabama.
 26365. Lesley, Dictionary Foss. Plants Pa., Geol. Surv. Pa., P 4, 1889, II,
 1889, p. 869.
- 26345 **Rhabdocarpus** sp. Lesquereux.
 to Pottsville (Penn.). Dolomite and Cordova, Alabama.
 26351. Lesley, Dictionary Foss. Plants Pa., Geol. Surv. Pa., P 4, 1889, II,
 1889, p. 869.
- Rhabdocarpus.** See **Rhabdocarpus.**
- 19566 **Rhacophyllum acuminatum** (Lesquereux) David White. Types.
 to Le Roy (Penn.). Garnett, Kansas.
 19568. David White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 108.
 = *Aphlebia acuminata*.
19470. **Rhacophyllum clarkii** Lesquereux. Type.
 Pennsylvanian. Rhode Island.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, pp. 319, 320.
19469. **Rhacophyllum corallum** Lesquereux. Type.
 Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
 nois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P
 Atlas, 1879, pl. 57, figs. 4, 4a; Text, I, 1880, p. 317.
19435. **Rhacophyllum expansum** Lesquereux. Type.
 Anthracite (Penn.). Olyphant, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 57, fig. 6; Text, I, 1880, p. 323.
19468. **Rhacophyllum filiforme** (Gutbier) Schimper. Supplemental type.
 Le Roy (Penn.). Garnett, Kansas.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 838.
 = *Aphlebia filiformis*.

19442. **Rhacophyllum fucoideum** Lesquereux. Types.
 19443. Allegheny (Penn.). Mazon Creek, Grundy County,
 Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 58, figs. 6, 7; Text, I, 1880, p. 325.
19445. **Rhacophyllum hamulosum** Lesquereux. Type.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 58, fig. 3; Text, I, 1880, p. 321.
19465. **Rhacophyllum membranaceum** Lesquereux. Types.
 19466. Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 58, fig. 1; Text, I, 1880, pp. 312, 313.
19436. **Rhacophyllum spinosum** Lesquereux. Type.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 320.
 = *Aphlebia spinosa*.
19431. **Rhacophyllum strongii** Lesquereux. Type.
 Allegheny (Penn.). Mazon Creek, Grundy County,
 Illinois.
 Lesquereux, Geol. Surv. Ill., IV, 1870, p. 417, pl. 18, fig. 1; Coal
 Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, I, 1880,
 p. 325.
19453. **Rhacophyllum trichoideum** Lesquereux. Types.
 19454. Anthracite (Penn.). Oakwood Colliery, Wilkesbarre,
 Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 322.
 = *Aphlebia trichoidea*.
19414. **Rhacophyllum truncatum** Lesquereux. Type.
 Catskill (Dev.). Narrows above Caxton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 9, pl. 50, fig. 7; Text, I, 1880, p. 311.
30875. **Rhamnacinium radiatum** Felix. Illustrated specimen.
 Miocene (Tert.). Near head of Crystal Creek, Yellowstone
 National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 769,
 pl. 118, figs. 6, 7; pl. 119, fig. 1.
6985. **Rhamnites concinnus** Newberry. Type.
 (564.) Fort Union (Tert.). Fort Union, North Dakota.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 50; U. S. Geol.
 Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, fig. 7;
 Mon. XXXV, U. S. Geol. Surv., 1898, p. 118, pl. 33, fig. 7.

6984. **Rhamnites concinnus** Newberry. Illustrated specimen.
Fort Union (Tert.). Fort Union, Buford County, North
Dakota.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 118, pl. 33, fig. 8.
See *Viburnum asperum*.
447. **Rhamnites intermedius** Lesquereux. Type.
Green River (Tert.). Washakie Station, near Bridgers
Pass, Carbon County, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 286;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 282, pl. 54,
fig. 3.
432. **Rhamnus alaternoides** Heer. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 278,
pl. 52, fig. 11.
439. **Rhamnus cleburni** Lesquereux. Illustrated specimens.
440. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 280,
pl. 53, figs. 1, 3.
2580. **Rhamnus cleburni** Lesquereux var.
Eocene? (Tert.). Cherry Creek, Wasco County, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 20.
1558. **Rhamnus deformatus** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 126,
pl. 20, fig. 6.
6958. **Rhamnus elegans** Newberry. Type.
Laramie (Cret.). Belmont, Colorado.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 49; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 117, pl. 50, fig. 2.
- 356a. **Rhamnus goldianus** Lesquereux. Illustrated specimens.
441 Denver (Cret.). Golden, Colorado.
to Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 281,
443. pl. 53, figs. 2, 4-8.
445.
5321. **Rhamnus goldianus** Lesquereux. See *Berchemia multinervis*.
433. **Rhamnus inæqualis** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 279,
pl. 52, fig. 16.
= *Diospyros brachysepala*.
436. **Rhamnus rectinervis** Heer. Illustrated specimens.
437. Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 279,
pl. 52, figs. 12, 13.

938. **Rhamnus rectinervis** Heer. Illustrated specimen.
Upper Cretaceous. Anthracite Creek, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 279,
pl. 52, fig. 15.
450. **Rhamnus rossmässleri** Unger. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 283,
pl. 54, fig. 4.
= *Juglans rhamnoides*.
50106. **Rhamnus similis** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, four miles southwest
of Brookville, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 168, pl. 35,
figs. 12, 13.
748. **Rhamnus tenax** Lesquereux. Type.
Dakota (Cret.). Southern Kansas.
Lesquereux, Amer. Journ. Sci., LXVI, 1868, p. 101; Rept. U. S.
Geol. Surv. Terr., VI, Pt. I, 1874, p. 109, pl. 21, fig. 4.
25016. **Rhizomorpha sigillariæ** Lesquereux. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Proc. Am. Phil. Soc., 1877, p. 174; Coal Flora, Second
Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, p. 1, pl. B, figs.
11, 11a; Text, I, 1880, p. 3.
- 1871 to 1874. **Rhus acuminata** Lesquereux. Illustrated specimens.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 194,
pl. 42, figs. 14-17.
2582. **Rhus bendirei** Lesquereux. Types.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 15, pl. 9, fig. 2.
= *Juglans oregoniana* (part).
1887. **Rhus cassioides** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 193,
pl. 41, fig. 11.
1642. **Rhus? drymeja** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 416.
= *Myrica drymeja*.
See *Callicoma microphylla*.
- 477 to 479. **Rhus evansii** Lesquereux. Types.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1871 [1872], p. 293;
1872 [1873], p. 402; Rept. U. S. Geol. Surv. Terr., VII, Pt. II,
1878, p. 291, pl. 50, fig. 4; pl. 53, figs. 5-9.

3764. **Rhus frigida** Knowlton. Type.
Eocene (Tert.). Herendeen Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 227, pl. 9, fig. 6.
- 1890 **Rhus hilliae** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1892. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 194, pl. 41, figs. 12, 14, 15.
530. **Rhus membranacea** Lesquereux. Types.
531. Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 292,
pl. 64, figs. 6, 7.
7587. **Rhus mixta** Lesquereux. Illustrated specimens.
7587a. Miocene (Tert.). Comstock, Douglas County, Oregon.
7588. Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
7588a. p. 49, pl. 3, figs. 2, 3; pl. 6, figs. 2, 3.
560. **Rhus? nervosa** Newberry. Types.
561. Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 53; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, figs. 3, 5;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 114, pl. 33, figs. 3, 5.
7677. **Rhus? nevadensis** Knowlton. Type.
Esmeralda (Neocene). 4.5 kilometers northeast of Emi-
grant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 218, pl. 30, fig. 15.
7637. **Rhus payettensis** Knowlton. Types.
8311. Payette, Miocene (Tert.). Two miles southeast of Marsh,
Boise County, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 733, pl. 101, figs. 6, 7.
2691. **Rhus powelliana** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 155, pl. 56,
figs. 4, 5.
481. **Rhus pseudo-meriani** Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 293,
pl. 58, fig. 11.
= *Quercus doljensis*.
- 358 **Rhus rosæfolia** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
360. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 293,
pl. 42, figs. 7-9.
See *Weinmannia rosæfolia*.
1882. **Rhus subrhomboidalis** Lesquereux. Types.
1883. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 195,
pl. 41, figs. 16, 17.

50325. **Rhus trifolioides** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 196.
3081. **Rhus uddeni** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 154, pl. 57, fig. 2.
- 188a. **Rhus vexans** Lesquereux. Type.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 195 pl. 41, fig. 20.
8550. **Rhus** sp. Knowlton.
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 70, pl. 14, fig. 6.
3236. **Rogersia angustifolia** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 288, pl. 143, fig. 2; pl. 149, figs. 4, 8; pl. 150, figs. 2-7.
3227. **Rogersia longifolia** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal; Fredericksburg; Kankeys, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 287, 288, pl. 139, fig. 6; pl. 144, fig. 2; pl. 150, fig. 1; pl. 159, figs. 1, 2.
1912. **Rosa hilliae** Lesquereux. Type.
Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 199, pl. 40, fig. 17.
3. **Rosellinites lapideus** (Lesquereux) Knowlton. Type.
Laramie (Cret.). Raton Mountains, New Mexico.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 204.
See *Spheria lapidea*.
8533. **Rulac cratægifolia** Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 77, pl. 16, fig. 7.
115. **Sabal campbelli** Newberry. Types.
6943. Puget Sound (Cret.). Chuckanut, Bellingham Bay, Washington.
Newberry, Boston Journ. Nat. Hist., VII, 1863, p. 515; Mon. XXXV, 1898, p. 27, pl. 21, figs. 1, 2.
6989. **Sabal campbelli** Newberry. Illustrated specimen.
Fort Union (Tert.). Yellowstone River (Dawson County?), Montana.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 41; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 10.
= *Sabal grandifolia*.

6957. **Sabal grandifolia** Newberry. Types.
 6989. Laramie (Cret.). Fishers Peak, Las Animas County,
 6990. Colorado.
 7008. Fort Union (Tert.). Tongue River, Custer County, and
 Yellowstone River, Montana.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 28, pl. 25; pl. 63,
 fig. 5; pl. 64, figs. 2, 2a.
 See *Sabal campbelli*.
6937. **Sabal imperialis** Dawson. Illustrated specimen.
 Puget Sound (Cret.). Nanaimo, Vancouver Island, British
 Columbia.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 30, pl. 16,
 figs. 6, 6a.
- 7024 **Sabal powelli** Newberry. Types.
 to Green River (Tert.). Green River, Wyoming.
 7026. Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 504; Mon. XXXV,
 U. S. Geol. Surv., 1898, p. 30, pl. 63, fig. 6; pl. 64, figs. 1, 1a.
107. **Sabalites fructifer** Lesquereux. Type.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 114,
 pl. 11, fig. 3.
108. **Sabalites grayanus** Lesquereux. Illustrated specimens.
 109. Montana (Cret.). Point of Rocks, Wyoming.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 112,
 pl. 12, figs. 1, 2.
3295. **Sagenopteris elliptica** Fontaine. Type.
 Potomac (Low. Cret.). Roadside near Potomac Run;
 Kankeys, Virginia; Covington street, Baltimore,
 Maryland.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 149, pl. 27, figs.
 9, 11-17.
8213. **Sagenopteris emmonsii** Fontaine. Illustrated specimens.
 8214. Triassic. Ellingtons, four miles from Lockville, Chatham
 County, North Carolina.
 Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II,
 1900, p. 286, pl. 39, figs. 1-3.
3397. **Sagenopteris latifolia** Fontaine. Type.
 3782. Potomac (Low. Cret.). Near Telegraph Station (Fred-
 ericksburg area), Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 148, pl. 27, fig. 10.
4007. **Sagenopteris mantelli** (Dunker) Schenk. Illustrated specimen.
 Shasta (Low. Cret.). Near Lowrey, Tehama County,
 California.
 Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 233,
 pl. 65, fig. 32.
 See *Glossozamites klipsteini*.

3348. **Sagenopteris virginiensis** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 150, pl. 138, fig. 13;
pl. 139, fig. 1.
4009. **Sagenopteris?** sp. Fontaine.
Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1905, p. 238,
pl. 65, fig. 46.
5384. **Sagittaria victor-masoni** Ward. Type.
Potomac (Low. Cret.). White House Bluff, Mount Ver-
non, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 354, pl. 3,
fig. 5.
2310. **Sagittaria** sp. Lesquereux.
Eocene? (Tert.). Sitka, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 37.
3354. **Saliciphyllum ellipticum** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal; Fredericksburg; 72d milepost, near Brooke,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 302, 303, pl. 150,
fig. 8.
3380. **Saliciphyllum longifolium** Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 302, pl. 150, fig. 12.
838. **Salisburia polymorpha** Lesquereux. Illustrated specimen.
Montana (Cret.). Spring Canyon, near Fort Ellis, Montana.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 86,
pl. 60, fig. 41.
= *Protophyllocladus polymorphus*.
See *Thinnfeldia montana*.
1682. **Salix amygdalæfolia** Lesquereux. Types.
1683. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 156, pl. 31, figs. 1, 2.
199. **Salix angusta** Al. Braun. Illustrated specimen.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 168,
pl. 22, fig. 4.
8298. **Salix angusta** Al. Braun. Illustrated specimen.
Payette (Miocene). Idaho City, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 727, pl. 99, fig. 12.
7681. **Salix angusta?** Al. Braun. Illustrated specimen.
Esmeralda (Neocene). 4.5 kilometers northeast of Emi-
grant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 212, pl. 30, fig. 22.

7023. **Salix angusta?** Al. Braun. Illustrated specimen.
Green River (Tert.). Green River, Sweetwater County,
Wyoming.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 54, pl. 65, fig. 2.
610. **Salix cuneata** Newberry. Types.
610a. Dakota (Cret.). Mouth of Big Sioux River, Nebraska.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 21; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 1, fig. 1 (as
Salix meekii); pl. 2, fig. 2; Mon. XXXV, U. S. Geol. Surv.,
1898, p. 55, pl. 2, figs. 1, 2.
8530. **Salix dayana** Knowlton. Type.
8531. Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 31, pl. 2, figs.
9, 10.
50038. **Salix deleta** Lesquereux. Type.
Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 49, pl. 3, fig. 8.
2589. **Salix engelhardti** Lesquereux. Type.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 17, pl. 8, fig. 2.
609. **Salix flexuosa** Newberry. Type.
Dakota (Cret.). Mouth of Big Sioux River, Nebraska.
Newberry, Ann. Lyc. Nat. Hist., IX, 1868, p. 21; Ills. Cret. and
Tert. Plants, U. S. Geol. Surv., 1878, pl. 1, fig. 4; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 56, pl. 2, fig. 4.
=*Salix proteæfolia flexuosa*.
6928. **Salix flexuosa** Newberry. Illustrated specimens.
6931. Dakota (Cret.). Whetstone Creek, Colfax County, New
Mexico.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 56, pl. 13,
fig. 4; pl. 14, fig. 1.
6929. **Salix foliosa** Newberry. Types.
6930. Dakota (Cret.). Whetstone Creek, Colfax County, New
Mexico.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 57, pl. 13, figs.
5, 6.
197. **Salix integra** Goepfert. Illustrated specimen.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 167,
pl. 22, fig. 1.
198. **Salix media** Heer. Illustrated specimen.
Green River (Tert.). Green River, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1898, p. 168,
pl. 22, fig. 3.

3761. **Salix minuta** Knowlton. Type.
Eocene? (Tert.). Herendeen Bay, Alaska.
Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 218, pl. 9, fig. 1.
8525. **Salix mixta** Knowlton. Types.
8526. Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 32, pl. 2, figs.
11, 12.
- 8521 **Salix perplexa** Knowlton. Types.
to Mascall beds, Miocene (Tert.). Twelve miles west of
8524. Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 31, pl. 2, figs.
5-8.
611. **Salix proteæfolia** Lesquereux. Types.
612. Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 94; Rept. U. S.
Geol. Surv. Terr., VI, Pt. I, 1874, p. 60, pl. 5, figs. 1-3.
609. **Salix proteæfolia flexuosa** Lesquereux. See *Salix flexuosa*.
50041. **Salix proteæfolia flexuosa** Lesquereux.
50042. Illustrated specimens.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 50, pl. 64,
figs. 4, 5.
50043. **Salix proteæfolia lanceolata** Lesquereux.
50047. Illustrated specimen.
50148. Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 50, pl. 64, figs.
6, 7, 8.
- 50044 **Salix proteæfolia linearifolia** Lesquereux.
to Illustrated specimen.
50046. Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 49, pl. 64, figs.
1-3.
50147. **Salix proteæfolia longifolia** Lesquereux.
Illustrated specimens.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 50, pl. 64, fig. 9.
- 8527 **Salix pseudoargentea** Knowlton. Types.
to Mascall beds, Miocene (Tert.). Van Horn's Ranch, John
8529. Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 31, pl. 2, figs.
2-4.
2595. **Salix schimperii** Lesquereux. Type.
Eocene? (Tert.). Cherry Creek, Wasco County, Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 21, pl. 13, fig. 5.

7679. *Salix vacciniifolia* Knowlton. Types.
7680. Esmeralda (Neocene). 3.8 and 4.5 kilometers northeast of Emigrant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 212, pl. 30, figs. 8, 20.
5077. *Salix varians* Heer. Illustrated specimen.
Miocene (Tert.). Lamar River, between Cache and Calfee creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 697, pl. 85, fig. 3.
7683. *Salix* sp. Knowlton.
Esmeralda (Neocene). 4.5 kilometers northeast of Emigrant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 213, pl. 30, fig. 13.
7695. *Salix* ? sp. Knowlton.
7696. Esmeralda (Neocene). 3.8 kilometers northeast of Emigrant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 213, pl. 30, fig. 14.
50146. *Salix* sp. Lesquereux (fruiting catkin).
Dakota (Cret.). Cloud County, ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 51, pl. 8, fig. 6.
1617. *Salvinia alleni* Lesquereux. Type.
Green River (Tert.). Florissant (South Park), Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, 1883, p. 136, pl. 21, figs. 10, 11.
= *Tmesipteris alleni*.
See *Ophioglossum alleni*.
90. *Salvinia cyclophylla* Lesquereux. Type.
Green River (Tert.). Middle Park, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 408; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 64, pl. 5, fig. 10.
= *Phyllites cyclophylla*.
3257. *Sapindopsis brevifolia* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 300, pl. 153, fig. 4; pl. 155, figs. 1, 7; pl. 163, fig. 3.
3383. *Sapindopsis cordata* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 296, pl. 147, fig. 1.
3261. *Sapindopsis elliptica* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 297, pl. 147, fig. 3.

3234. **Sapindopsis magnifolia** Fontaine. Types.
 3861. Potomac (Low. Cret.). 72d milepost; bank near Brooke;
 White House Bluff, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 297, 298, pl. 151,
 figs. 2, 3; pl. 152, figs. 2, 3; pl. 153, fig. 2; pl. 154, figs. 1, 5;
 pl. 155, fig. 6.
3235. **Sapindopsis obtusifolia** Fontaine. Type.
 Potomac (Low. Cret.). Deep Bottom; 72d milepost, near
 Brooke, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 301, 302, pl. 156,
 fig. 13; pl. 159, figs. 3-6.
3438. **Sapindopsis parvifolia** Fontaine. Type.
 Potomac (Low. Cret.). 72d milepost; bank near Brooke,
 Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 300, pl. 154, fig. 6.
3369. **Sapindopsis tenuinervis** Fontaine. Types.
 3909. Potomac (Low. Cret.). 72d milepost; bank near Brooke,
 Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 301, pl. 153, fig. 1.
3225. **Sapindopsis variabilis** Fontaine. Types.
 3859. Potomac (Low. Cret.). 72d milepost; bank near Brooke;
 3860. White House Bluff, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 298-300, pl. 151,
 fig. 1; pl. 152, figs. 1, 4; pl. 153, fig. 3; pl. 154, figs. 2-4;
 pl. 155, figs. 2-5.
7365. **Sapindopsis variabilis** Fontaine. Illustrated specimen.
 Lakota (Low. Cret.). Cliff East bank of Oak Creek, two
 miles below Robbins's Ranch, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept., U. S. Geol. Surv., Pt. II, 1899,
 p. 690, pl. 169, fig. 9.
570. **Sapindus affinis** Newberry. Type.
 Fort Union (Tert.). Mouth of Yellowstone River, North
 Dakota.
 Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 51; U. S. Geol.
 Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 24, fig. 1;
 Mon. XXXV, U. S. Geol. Surv., 1898, p. 116, pl. 30, fig. 1.
4145. **Sapindus affinis** Newberry. Illustrated specimens.
 5373. Fort Union (Tert.). Gladstone, North Dakota.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 67, pl. 30, figs. 1, 2.
4321. **Sapindus affinis** Newberry. Illustrated specimens.
 4382. Fort Union (Tert.). Yellowstone River, one-half mile
 4408. below mouth of Elk Creek, Yellowstone National Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 736,
 pl. 102, figs. 1-3.
4149. **Sapindus alatus** Ward. Type.
 4150. Fort Union (Tert.). Seven Mile Creek, below Glendive,
 Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 68, pl. 31, figs. 3, 4.

390. **Sapindus angustifolius** Lesquereux. Types.
391. Green River (Tert.). Costello's Ranch, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr. 1873
[1874], p. 415; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 265, pl. 49, figs. 2-6.
- 1834 **Sapindus angustifolius** Lesquereux. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
1841. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 181,
pl. 37, figs. 2-7; pl. 39, fig. 12.
2371. **Sapindus angustifolius** Lesquereux. Illustrated specimen.
Denver (Cret.). Rhyolite beds, Silver Cliff, Colorado.
Lesquereux, Proc. U. S. Nat. Mus., X, 1877, p. 44, pl. 3, fig. 6.
- 4146 **Sapindus angustifolius** Lesquereux. Illustrated specimens.
to Fort Union (Tert.). Seven Mile Creek, below Glendive,
4148. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 68, pl. 31, figs. 5-7.
386. **Sapindus caudatus** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 264,
pl. 48, fig. 6.
- 396 **Sapindus coriaceus** Lesquereux. Types.
to Green River (Tert.). Elko Station, Nevada.
398. Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 415; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 265, pl. 49, figs. 12-14.
=Sapotacites copeanus (part).
50121. **Sapindus diversifolius** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv. 1891, p. 158, pl. 64,
fig. 18.
2604. **Sapindus falsifolius** Al. Braun. Illustrated specimen.
Eolignitic (Tert.). Boaz Station, Graves County, Kentucky.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 12, pl. 4, fig. 4.
4141. **Sapindus grandifolius** Ward. Types.
4144. Fort Union (Tert.). Seven Mile Creek, near Glendive,
4170. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 67, pl. 30, figs. 3-5;
pl. 31, figs. 1, 2.
4490. **Sapindus grandifolius** Ward. Illustrated specimen.
5051. Fort Union (Tert.). Platanus beds, Fossil Forest Ridge,
Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 737,
pl. 99, figs. 1, 2.
571. **Sapindus membranaceus** Newberry. Types.
572. Fort Union (Tert.). Mouth of Yellowstone River, North
Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 52; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 24, figs. 2, 3;
Mon. XXXV, U. S. Geol. Surv., 1898, p. 117, pl. 30, figs. 2, 3.

50119. **Sapindus morrisoni** Lesquereux. Illustrated specimens.
50120. Dakota (Cret.). Pipe Creek, Cloud County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 158, pl. 35,
figs. 1, 2.
- 392 **Sapindus obtusifolius** Lesquereux. Types.
to Green River (Tert.). Eight miles southeast of Green River
395. Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 266,
pl. 49, figs. 8-11.
8538. **Sapindus oregonianus** Knowlton. Type.
Mascall beds, Miocene (Tert.). Twelve miles west of
Mount Vernon, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 79, pl. 15, fig. 3.
389. **Sapindus stellariæfolius** Lesquereux. Type.
Green River (Tert.). South Park, near Florissant,
Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 264,
pl. 49, figs. 1-3, 5.
4364. **Sapindus wardii** Knowlton. Types.
5068. Fort Union and Miocene (Tert.). Fossil Forest Ridge,
Bed No. 5, and Yellowstone River, one-half mile below
mouth of Elk Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 738,
pl. 98, figs. 1, 2, pl. 99, fig. 5.
397. **Sapotacites copeanus** Ettingshausen. Illustrated specimen.
Tertiary. Elko Station, Nevada.
Ettingshausen, Denks. der Math. Nat. Classe der Kaiserlich. Akad.
der Wissensch., LXVII, 1883, p. 36; Mem. Geol. Surv. N. S. W.,
Pal. No. 2 (Tert. Fl. Aust.), 1888, p. 57.
See *Sapindus coriaceus*.
703. **Sapotacites haydenii** Heer. Illustrated specimens.
974. Dakota (Cret.). Blackbird Hill, Nebraska.
Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878,
pl. 5, fig. 1; Mon. XXXV, U. S. Geol. Surv., 1898, p. 126, pl. 5,
fig. 1.
50067. **Sapotacites** sp.? Lesquereux.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 114, pl. 65, fig. 3.
- 650a. **Sassafras acutilobum** Lesquereux. Types.
650b. Dakota (Cret.). Hills along Saline River, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 79,
pl. 14, figs. 1, 2.
650. **Sassafras acutilobum** Lesquereux. Illustrated specimen.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 56,
pl. 5, fig. 5.

3362. **Sassafras bilobatum** Fontaine. Type.
Potomac (Low. Cret.). Deep Bottom; 72d milepost, near
Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 290, pl. 156, fig. 12;
pl. 164, fig. 4.
6919. **Sassafras cretaceum** Newberry. Illustrated specimens.
6921 Dakota (Cret.). Fort Harker, Kansas.
to Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 98, pl. 7, figs. 1, 2;
6924. pl. 8, figs. 1-3.
651. **Sassafras (Araliopsis) cretaceum** Newberry. Illustrated specimen.
Dakota (Cret.). South of Fort Harker, on Saline River,
Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 80, pl. 11,
fig. 2.
2688. **Sassafras (Araliopsis) cretaceum grossedentatum** Lesque-
reux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 101, pl. 51, fig. 5.
3663. **Sassafras cretaceum heterolobum** Fontaine. Type.
3907. Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 289, 290, pl. 152,
fig. 5; pl. 159, fig. 8; pl. 164, fig. 5.
652. **Sassafras (Araliopsis) cretaceum obtusum** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 803,
pl. 12, fig. 3.
6925. **Sassafras cretaceum recurvatum** (Lesquereux) Newberry. Illustrated specimen.
Dakota (Cret.). Fort Harker, Kansas.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 99, pl. 9, fig. 2.
687. **Sassafras harkerianum** Lesquereux. Illustrated specimen,
Dakota (Cret.). Smoky Hill Forks, south of Fort Harker,
Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 81,
pl. 11, fig. 3.
= *Cissites harkerianus*.
653. **Sassafras mirabile** Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 424.
= *Sassafras (Araliopsis) mirabile*.
653. **Sassafras (Araliopsis) mirabile** Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 80,
pl. 12, fig. 1.
See *Sassafras mirabile*.

654. *Sassafras (Araliopsis) mirabile* Lesquereux. See *Platanus latiloba*.
6890.
648. *Sassafras mudgii* Lesquereux. Illustrated specimen.
649. Dakota (Cret.). Hills along Saline River, near Salina, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 78, pl. 14, figs. 3, 4; pl. 30, fig. 7.
6002. *Sassafras mudgii* Lesquereux. Illustrated specimens.
6004. Dakota (Low. Cret.). Evans's quarry on Minnekahta Creek,
6006. four miles below Hot Springs, South Dakota.
Ward, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 705, pl. 170, figs. 4, 5; pl. 171, fig. 1.
690. *Sassafras obtusum* Lesquereux. Illustrated specimen.
Dakota (Cret.). Lancaster County, Nebraska.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 81, pl. 13, fig. 2.
= *Cissites salisburiaefolius*.
3906. *Sassafras parvifolium* Fontaine. Type.
Potomac (Low. Cret.). Covington street, Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 289, pl. 139, fig. 7.
656. *Sassafras (Araliopsis) recurvatum* Lesquereux. Type.
Dakota (Cret.). Fort Harker, Kansas.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873], p. 424 (as *S. recurvatus*); Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 57.
See *Platanus recurvata*.
655. *Sassafras?* *subintegrifolium* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 99; Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 82, pl. 3, fig. 5.
3485. *Schizoneura planicostata* (Rogers) Fontaine.
30946. Illustrated specimens.
to Triassic. Clover Hill and Carbon Hill, Richmond Coal
30948. Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 14, pl. 1, fig. 1.
3484. *Schizoneura virginiensis* Fontaine. Types.
30942. Triassic. Clover Hill, Richmond Coal Field, Virginia.
30945. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 17, pl. 1, figs. 4-6.
3486. *Schizoneura* sp.? Fontaine.
Triassic. Clover Hill, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 16, pl. 1, fig. 3.
8327. *Schizoneura* sp.? Penhallow.
Genesee Slates, Erian (Upp. Dev.). Near Penn Yan, Yates County, New York.
Penhallow, Proc. U. S. Nat. Mus., XVI, 1893, p. 107, pl. 9, fig. 3.

3368. *Scleropteris dentata* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 153, pl. 63, figs. 3, 4.
7355. *Scleropteris distantifolia* Fontaine. Type.
Lakota (Low. Cret.). South Fork of Hay Creek, near
Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 662, pl. 162, figs. 2, 3.
3319. *Scleropteris elliptica* Fontaine. Types.
3794. Potomac (Low. Cret.). Fredericksburg; lignite deposit
near Potomac Run; fishing hut above Dutch Gap Canal;
Kankeys; near Telegraph Station, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 151, 152, pl. 28,
figs. 2, 4, 6; pl. 29, fig. 1.
3371. *Scleropteris elliptica longifolia* Fontaine. Types.
3414. Potomac (Low. Cret.). Fredericksburg, Virginia.
3969. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 152, pl. 28, fig. 7.
7357. *Scleropteris rotundifolia* Fontaine. Type.
Lakota (Low. Cret.). South Fork of Hay Creek, near
Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 663, pl. 162, figs. 4, 5.
- 5376 *Scleropteris vernonensis* Ward. Types.
to Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
5378. Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1895, p. 349,
pl. 2, figs. 1-3.
3927. *Scleropteris virginica* Fontaine. Type.
Potomac (Low. Cret.). Red clay banks of Dutch Gap Canal,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 152, pl. 28, figs. 3, 5.
2. *Sclerotites rubellus* (Lesquereux) Meschinelli. Type.
Denver (Cret.). Golden, Colorado.
Meschinelli, Syllog. Fung. Foss., 1892, p. 69 [805].
See *Sclerotium rubellum*.
2. *Sclerotium rubellum* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 35,
pl. 1, fig. 2.
= *Sclerotites rubellus*.
8177. *Selaginella apus* (Linnæus) Springer. Supplemental type.
Interglacial. Lookout Point, Yellowstone National Park.
Knowlton, Plant World, III, Feb., 1900, p. 31.
35. *Selaginella berthoudi* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 46,
pl. 5, fig. 12.

91. **Selaginella falcata** Lesquereux. Types.
 92. Montana (Cret.). Point of Rocks, Wyoming.
544. Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
 545. p. 365; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 548. [1876], p. 297; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 46, pl. 61, figs. 12-15; pl. 64, figs. 13, 13a.
 = *Lycopodium lesquereuxiana* (part).
62. **Sequoia acuminata** Lesquereux. Type.
 Laramie (Cret.). Black Buttes, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 80,
 pl. 7, figs. 15, 16.
87. **Sequoia affinis** Lesquereux. Types.
 88. Green River (Tert.). Florissant, Colorado.
 Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876],
 p. 384; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874
 [1876], p. 310; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
 p. 75, pl. 65, figs. 1, 2.
 = *Sequoia langsdorfii*.
3254. **Sequoia ambigua** Heer. Illustrated specimens.
 3854. Potomac (Low. Cret.). Fishing hut above Dutch Gap
 3858. Canal; river bank above fishing hut; telegraph station,
 Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 245, pl. 118, fig. 2;
 pl. 120, figs. 1-6; pl. 127, fig. 5; pl. 132, fig. 3.
57. **Sequoia angustifolia** Lesquereux. Type.
 Green River (Tert.). Elko Station, Nevada.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 372; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 77,
 pl. 7, fig. 6.
8289. **Sequoia angustifolia?** Lesquereux. Illustrated specimen.
 Payette (Miocene). Two miles southeast of Marsh, Boise
 County, Idaho.
 Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
 p. 722, pl. 99, fig. 4.
75. **Sequoia biformis** Lesquereux. Types.
 to Montana (Cret.). Point of Rocks, Wyoming.
 78. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 80,
 pl. 62, figs. 15-18.
 = *Geinitzia biformis*.
4226. **Sequoia biformis** Lesquereux. Illustrated specimens.
 5368. Montana (Cret.). Point of Rocks, Wyoming.
 5369. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 16, pl. 2, figs. 3-5.
 = *Geinitzia biformis*.
79. **Sequoia brevifolia** Heer. Illustrated specimens.
 81. Montana (Cret.). Point of Rocks, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 79,
 pl. 61, figs. 26, 27.

593. *Sequoia condita* Lesquereux. Illustrated specimens.
596. Dakota (Cret.). Near Fort Harker, Kansas.
- 596a. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 32,
597. pl. I, figs. 5-7, 9.
6935. *Sequoia cuneata* Newberry. Types.
6936. Puget Sound (Cret.). Nanaimo, Vancouver Island, British
Columbia.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 18, pl. 14,
figs. 3, 4.
See *Taxodium cuneatum*.
3251. *Sequoia cycadopsis* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 243, pl. 112, figs. 9-11;
pl. 113, figs. 1-3.
3315. *Sequoia densifolia* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 246, pl. 121, fig. 4.
594. *Sequoia formosa* Lesquereux. Type.
Dakota (Cret.). Near Decatur, Nebraska.
Lesquereux, Amer. Journ. Sci., XLVI, 1868, p. 92; Rept. U. S.
Geol. Surv. Terr., VI, Pt. I, 1874, p. 50, pl. I, fig. 9.
7415. *Sequoia gracilis* Heer. Illustrated specimen.
Lakota (Low. Cret.). South side Pine Creek, two and one-
half miles above Mrs. Dorsett's Ranch, Crook County,
Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 675, pl. 166, fig. 2.
3252. *Sequoia gracilis* Heer. Illustrated specimens.
Potomac. (Low Cret.). 72d milepost, near Brooke; bank
near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 247, pl. 126, figs. 3, 4.
595. *Sequoia gracillima* (Lesquereux) Newberry. Type.
Dakota (Cret.). Mouth of Iowa Creek, Kansas.
Newberry, Mon. XXVI, U. S. Geol. Surv., 1895, p. 50.
See *Glyptostrobus gracillima*.
6932. *Sequoia gracillima* (Lesquereux) Newberry. Illustrated specimen.
Dakota (Cret.). Whetstone Creek, Colfax County, New
Mexico.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 19, pl. 14, fig. 6.
59. *Sequoia heerii* Lesquereux. Types.
60. Eocene (Tert.). Sage Creek, Beaverhead County, Montana.
Lesquereux, Ann. Rept. U. S. Geol. Surv., 1871 [1872], p. 290;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 77, pl. 7,
figs. 11, 13.

55. *Sequoia langsdorfii* (Brongniart) Heer. Illustrated specimen.
Fort Union? (Tert.). Yellowstone River, Montana.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 46; U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 11, fig. 4.
87. *Sequoia langsdorfii* (Brongniart) Heer. Illustrated specimens.
88. Green River (Tert.). Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1872 [1873], p. 410.
See *Sequoia affinis*.
4261. *Sequoia langsdorfii* (Brongniart) Heer. Illustrated specimen.
Fort Union and Miocene (Tert.). Southeast side of hill above Lost Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 682, pl. 82, fig. 2.
5119. *Sequoia langsdorfii* (Brongniart) Heer. Illustrated specimen.
Laramie (Cret.). North of Pinyon Peak, on Wolverine Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 657, pl. 77, fig. 5.
7086. *Sequoia langsdorfii* (Brongniart) Heer. Illustrated specimen.
Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 25.
See *Taxodium distichum miocenicum*.
61. *Sequoia longifolia* Lesquereux. Types.
73. Laramie? (Cret.). Greeley, Colorado.
74. Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 79, pl. 7, fig. 14; pl. 61, figs. 28, 29.
= *Geinitzia longifolia*.
30873. *Sequoia magnifica* Knowlton. Type.
Miocene (Tert.). Head of Crystal Creek and Cache Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 761, pls. 104, 105, 110, 117, figs. 1-5.
3751. *Sequoia pagiophylloides* Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 276, pl. 42, figs. 1-3a.
65. *Sequoia reichenbachi* (Geinitz) Heer. Illustrated specimens.
68. Livingston (Cret.). Spring Canyon, near Fort Ellis, Montana.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 218.
See *Abietites dubius*.

591. **Sequoia reichenbachi** (Geinitz) Heer. Illustrated specimen.
Dakota (Cret.). Nine miles south of Fort Harker, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 51,
pl. 1, figs. 10, 10b.
5929. **Sequoia reichenbachi** (Geinitz) Heer. Illustrated specimens.
7402. Lakota (Low. Cret.). Cliff on north side Pine Creek,
near Mrs. Dorsett's Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 674, pl. 165, figs. 1, 2; pl. 166, fig. 1.
3253. **Sequoia reichenbachi** (Geinitz) Heer. Illustrated specimens.
3857. Potomac (Low. Cret.). Fredericksburg; fishing hut above
Dutch Gap Canal; banks of canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 243, 244, pl. 118,
figs. 1, 4; pl. 119, figs. 1-5; pl. 120, figs. 7, 8; pl. 122, fig. 2; pl.
167, fig. 5.
3379. **Sequoia reichenbachi longifolia** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; fishing hut above
Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 244, pl. 117, fig. 8.
3255. **Sequoia rigida** Heer. Illustrated specimens.
3855. Potomac (Low. Cret.). Near Telegraph Station; hillside
3856. near Potomac Run, Virginia.
3914. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 246, pl. 118, fig. 3;
3949. pl. 121, fig. 2; pl. 126, fig. 2; pl. 130, fig. 3.
- 7119 **Sequoia spinosa** Newberry. Types.
to Eocene (Tert.). Cook Inlet, Alaska.
7121. Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 21, pl. 53, fig. 4.
3317. **Sequoia subulata** Heer. Illustrated specimens.
Potomac (Low. Cret.). Fishing hut above Dutch Gap Canal;
Fredericksburg; near Telegraph Station, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 245, pl. 117, fig. 7;
pl. 118, figs. 5, 6.
30068. **Sequoia** sp. ? Knowlton.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 154, pl. 22, fig. 1.
3353. **Sequoia** sp. ? Fontaine.
3895. Potomac (Low. Cret.). 72d milepost, near Brooke; Fred-
ericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 248, pl. 116, fig. 7;
pl. 132, figs. 2, 5, 6, 10.
3925. **Sequoia** sp. ? Fontaine.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 247, pl. 120, fig. 9.
7361. **Sequoia** sp. Fontaine.
Lakota (Low. Cret.) Cliff on north side of valley of South
Fork of Hay Creek, two and one-half miles west of Bar-
rett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 676, pl. 166, figs. 3, 4.

8510. **Sequoia** sp. Knowlton (cone).
Mascall beds, Miocene (Tert.). Van Horn's Ranch, John Day Valley, Grant County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 26, pl. 1, fig. 2.
82. **Sequoia** sp. Lesquereux (cone).
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 79, pl. 61, fig. 30.
84. **Sequoia** sp. Lesquereux (cone).
Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. Geol. Surv. Terr., VII, Pt. II, 1878, p. 76, pl. 65, fig. 5.
5078. **Sequoia** sp. Knowlton (cones).
5097. Miocene (Tert.). Fossil Forest, Beds 5, 6, Yellowstone
5172. National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 683, pl. 81, fig. 8; pl. 82, figs. 6, 7.
- 16604 **Sigillaria brardii coriacea** David White. Types.
to Le Roy (Penn.). Lawrence, Kansas.
16609. White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 105.
16631. **Sigillaria brochanti** Brongniart. Supplemental type.
Anthracite (Penn.). Butler mine, Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 842.
6060. **Sigillaria (Asolanus) camptotænia** Wood.
6063. Illustrated specimens.
6064. Cherokee, Des Moines (Penn.). Near Gilkerson's Ford
6094. and Pitcher's Coal Mine, Henry County, Missouri.
6102. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 230, pl. 61, fig.
6106. 1 g; pl. 62, fig. i; pl. 64, fig. e; pl. 69; pl. 70, figs. 1, 3, 4.
6112.
16747. **Sigillaria cuspidata** Brongniart. Supplemental type.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, II, 1880, pp. 486, 487.
16828. **Sigillaria elliptica** Brongniart. Supplemental type.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, II, 1880, pp. 494, 495.
16399. **Sigillaria grand' euryi** Lesquereux. Types.
16400. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 795.
- 16806 **Sigillaria lacoei** Lesquereux. Types.
to Anthracite (Penn.). Plymouth, Pennsylvania.
16812. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas, 1879, pl. 72, fig. 12; Text, II, 1880, p. 499.

16570. *Sigillaria laurenciana* (Lesquereux) David White. Types.
16571. Le Roy (Penn.). Lawrence, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 106.
- 16779 *Sigillaria leptoderma* Lesquereux. Types.
to Anthracite (Penn.). Plymouth, Pennsylvania.
16783. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 72, fig. 10; Text, II, 1880, p. 489.
16445. *Sigillaria leveretti* Lesquereux. Types.
16446. Cherokee? (Penn.). Spring Run, Augusta Township, Des
Moines County, Iowa.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, pp. 800, 801, pl. 108, figs. 4, 5.
16517. *Sigillaria mamillaris* Brongniart. Illustrated specimens.
16518. Allegheny (Penn.). Olyphant, Pennsylvania.
16520. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 10, pl. 72, fig. 5; Text, II, 1880, p. 484; III, 1884,
p. 799, pl. 108, fig. 6.
16798. *Sigillaria marginata* Lesquereux. Types.
16799. Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 71, fig. 5; Text, II, 1880, p. 498.
16415. *Sigillaria monostigma* Lesquereux. Types.
16416. Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 73, figs. 3-5; Text, II, 1880, p. 468.
16486. *Sigillaria orbicularis* Brongniart. Supplemental type.
16487. Anthracite (Penn.). Maltby and Pittston, Pennsylvania.
Lesquereux, Coal Flora Second, Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, pp. 491, 492.
16553. *Sigillaria ovalis* Lesquereux. Type.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 71, fig. 1; Text, II, 1880, p. 495.
- 16709 *Sigillaria pittstoniana* Lesquereux. Types.
to Anthracite (Penn.). Plymouth, Pennsylvania.
16714. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 71, fig. 4; Text, II, 1880, p. 493.
16576. *Sigillaria restricta* (Lesquereux) David White. Type.
16577. Thayer shales (Penn.). Thayer, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 106.
16457. *Sigillaria saulli* Brongniart. Supplemental type.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 842.
16659. *Sigillaria* (*Asolanus*) *sigillarioides* (Lesquereux) David
White. Reverse of type.
Cherokee, Des Moines, (Penn.). Clinton, Henry County,
Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 239, pl. 70, fig. 2.

16754. **Sigillaria sillimanni** Brongniart. Supplemental type.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, pp. 493, 494.
16650. **Sigillaria suspecta** David White. Type.
19732. Le Roy (Penn.). Lawrence, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 106.
16614. **Sigillaria venosa** Brongniart. Supplemental type.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 842.
16778. **Sigillaria voltzii** Brongniart. Illustrated specimen.
Anthracite (Penn.). Plymouth, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, pl. 72, fig. 11, 1879, Text, II, 1880, pp. 492, 493.
16745. **Sigillaria williamsi** Lesquereux. Types.
16746. Anthracite (Penn.). Olyphant, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, II, 1880, p. 448; III, 1884, p. 801, pl. 107, fig. 15.
2265. **Sigillaria** sp.? Lesquereux.
Carboniferous. Centerville, Tennessee.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 30.
16643. **Sigillariostrobos clavatus** (Lesquereux) David White. Type.
Monongahela (Penn.). Near Pittsburg, Pennsylvania.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 106.
See *Trochophyllum clavatum*.
16640. **Sigillariostrobos clavatus** (Lesquereux) David White.
16641. Supplemental types.
Le Roy (Penn.). Lawrence, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 106.
See *Sigillariostrobos laurencianus*.
16401. **Sigillariostrobos lacoei** Lesquereux. Types.
16401a. Anthracite (Penn.). Olyphant, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, pp. 780, 792, 794, pl. 107, fig. 1 (as *Lycopodites lacoei*).
16640. **Sigillariostrobos laurencianus** Lesquereux. Types.
16641. Leroy (Penn.). Lawrence, Kansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 794.
= *Sigillariostrobos clavatus*.
99. **Smilax grandifolia** (Unger) Heer. Illustrated specimen.
Laramie? (Cret.). Carbon, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 94,
pl. 9, fig. 5.

50116. *Smilax grandifolia cretacea* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 40, pl. 46, fig. 3.
4436. *Smilax lamarensis* Knowlton. Types.
5134. Miocene (Tert.). East bank Lamar River, between Cache
5162. and Calfee creeks, and Fossil Forest Ridge, Yellowstone
National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 685,
pl. 121, figs. 3, 4.
2733. *Smilax undulata* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 39, pl. 46, fig. 2.
2613. *Smilax wardii* Lesquereux. Type.
Miocene (Tert.). Van Horn's Ranch, John Day Valley,
Oregon.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 19, pl. 13, fig. 1.
19612. *Sorocladus dispensus* Lesquereux. Type.
Dunkard (Perm.). Cassville, West Virginia.
Lesley, Dictionary Foss. Plants, Pa., Geol. Surv. Pa., P 4, III, 1890,
p. 973.
14270. *Sorocladus ophioglossoides* Lesquereux. Type.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, pl. 48, fig. 11; Text, I, 1880, pp. 329, 330.
= *Sphenopteris* (*Crossotheca*) *ophioglossoides*.
14273. *Sorocladus sagittatus* Lesquereux. Types.
14274. Allegheny (Penn.). Mazon Creek, Grundy County, Illi-
nois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 760.
4224. *Sparganium stygium* Heer. Illustrated specimens.
4225. Fort Union (Tert.). Seven Mile Creek, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 18, pl. 3, figs. 6, 7.
7665. *Spathites* sp. Knowlton.
Montana (Cret.). Dunn's Ranch, west of Harper's Sta-
tion, Albany County, Wyoming.
Knowlton, Bull. Geol. Soc. Amer., VIII, 1897, p. 140.
7703. *Spathyema* ? *nevadensis* Knowlton. Types.
7704. Esmeralda (Neocene). 3.8 kilometers northeast of Emi-
grant Peak, Esmeralda County, Nevada.
Knowlton, Twenty-first Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 211, pl. 30, figs. 17, 18.

8246. **Sphenoglossum quadrifolium** Emmons. Type.
Traissic. Haywood, Chatham County, North Carolina.
Emmons, Geol. Rept. Midland Counties, North Carolina, 1856,
p. 335, pl. 1, fig. 1; Amer. Geology, 1857, VI, p. 134, pl. 5, fig. 2.
= *Actinopteris quadrifolia*.
3337. **Sphenolepidium dentifolium** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 258, pl. 127, figs.
3, 4; pl. 128, figs. 2-6; pl. 129, fig. 5; pl. 130, figs. 4-6, 10.
3184. **Sphenolepidium kurrianum** (Dunker) Heer. Illustrated specimens.
3871 to Potomac (Low. Cret.). Dutch Gap Canal; entrance to
3873 Trent's Reach; hut above canal; Fredericksburg; 72d
milepost; bank near Brooke; near telegraph station,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 260, 261, pl. 126,
figs. 1, 5, 6; pl. 128, figs. 1, 7; pl. 129, figs. 1, 4, 6, 8; pl. 130,
fig. 11; pl. 131, fig. 4; pl. 167, fig. 2.
5941. **Sphenolepidium kurrianum** (Dunker) Heer. Illustrated specimens.
7400. Lakota (Low. Cret.). Pine Creek, near Mrs. Dorsett's
Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 681, pl. 166, figs. 12, 13.
3266. **Sphenolepidium pachyphyllum** Fontaine. Type.
3875. Potomac (Low. Cret.). Near Telegraph Station (Fredericksburg Area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 259, pl. 131, figs. 6, 7.
3198. **Sphenolepidium parceramosum** Fontaine. Type.
3876. Potomac (Low. Cret.). Fredericksburg; 72d milepost,
7877. near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 257, 258, pl. 129,
fig. 7; pl. 130, fig. 8; pl. 131, fig. 2.
- 5973b. **Sphenolepidium parceramosum** Fontaine. Illustrated specimens.
5973c. Lakota (Low. Cret.). Cliff east bank Oak Creek, near
Robbins's Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 682, pl. 163, fig. 11b; pl. 168, fig. 3.
- 5928a. **Sphenolepidium parceramosum** Fontaine. Illustrated specimens.
7395. Lakota (Low. Cret.). Cliff north side Pine Creek, two and
one-half miles below Mrs. Dorsett's Ranch, Crook
County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 682, pl. 168, figs. 1, 2.

3373. **Sphenolepidium recurvifolium** Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal; hillside near Potomac Run; near Telegraph
Station, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 258, 259, pl. 127,
fig. 2; pl. 130, figs. 2, 7.
3367. **Sphenolepidium sternbergianum** (Dunker) Heer. Illustrated specimens.
3878. Potomac (Low. Cret.). Hillside near Potomac Run;
3917. Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 261, pl. 121, figs. 8,
10, 11; pl. 130, fig. 9.
5382. **Sphenolepidium sternbergianum** (Dunker) Heer. Illustrated specimen.
Potomac (Low. Cret.). Near Mouth of Doag Creek,
Mount Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 359, pl. 3,
fig. 1.
3275. **Sphenolepidium sternbergianum densifolium** Fontaine. Illustrated specimens.
3879. Potomac (Low. Cret.). Near Telegraph Station; hillside
3928. near Potomac Run; 72d milepost; Fredericksburg,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 261, 262, pl. 118,
fig. 7; pl. 121, figs. 5, 7, 9; pl. 125, fig. 2; pl. 129, fig. 3; pl. 130,
fig. 1; pl. 131, figs. 1, 3; pl. 132, fig. 4.
3745. **Sphenolepidium sternbergianum densifolium** Fontaine. Illustrated specimen.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 268, pl. 36, fig. 10.
3338. **Sphenolepidium virginicum** Fontaine. Type.
3874. Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 259, 260, pl. 125,
fig. 4; pl. 166, fig. 6.
18710. **Sphenophyllum angustifolium** Germar. Illustrated specimen.
Monongahela (Penn.). Hocking Valley, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 726, pl. 93, fig. 8.
18629. **Sphenophyllum bifurcatum** Lesquereux. Type.
Pottsville (Penn.). Washington County, Arkansas.
Lesquereux, Rept. Geol. Surv. Ark., II, 1862, p. 309, pl. 1, fig. 2;
Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas,
1879, p. 1, pl. 2, figs. 10, 10a; Text, I, 1880, p. 55.
6086. **Sphenophyllum emarginatum** Brongniart. Illustrated specimen.
Cherokee, Des Moines (Penn.). Owen's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 177, pl. 59,
fig. 1d.

18509. **Sphenophyllum emarginatum minor** David White. Type.
Cherokee (Penn.). Lansing, Kansas.
White, Bull. No. 211, U. S. Geol. Surv., 1903, p. 103.
18291. **Sphenophyllum (Asterophyllites?) fasciculatum** (Lesque-
18292. reux) David White. See *Asterophyllites fasciculatus*.
18297.
5637. **Sphenophyllum (Asterophyllites?) fasciculatum** (Lesque-
5639. reux) David White. Illustrated specimens.
18295. Cherokee, Des Moines (Penn.). Owen's Coal Mine and
18296. Clinton, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 183, pl. 50, figs.
1-4.
12386. **Sphenophyllum lescurianum** David White. Types.
18711b. Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 182, pl. 50, fig. 6b;
pl. 51, fig. b; pl. 24, fig. 3c.
18468. **Sphenophyllum longifolium** Germar. Supplemental type.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 53.
5679. **Sphenophyllum majus** Bronn. Illustrated specimens.
5680. Cherokee, Des Moines (Penn.). Owen's Coal Mine, and
18711. near Clinton, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 180, pl. 50, figs. 5,
6a; pl. 51, fig. a; pl. 73, fig. 3.
6431. **Sphenophyllum suspectum** David White. Types.
6747. McAlester (Penn.). One-half mile west of McAlester,
Indian Territory.
White, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1899,
p. 522, pl. 68, figs. 11, 12.
18461. **Sphenophyllum tenerrimum** Ettingshausen.
to Illustrated specimens.
18464. Pottsville (Penn.). Rushville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 728, pl. 92, figs. 9-10a.
14953. **Sphenopteris brittsii** Lesquereux. Type.
Cherokee, Des Moines (Penn.). Clinton, Henry County,
Missouri.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 277, pl. 55, fig. 2.
14954. **Sphenopteris brittsii** Lesquereux. Illustrated specimens.
14955. Allegheny? (Penn.). Nelsonville, Ohio.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 764, pl. 102, figs. 3, 4.

5626. **Sphenopteris brittsii** Lesquereux. Illustrated specimens.
5668. Cherokee, Des Moines (Penn.). Pitcher's and Owen's
5669. coal mines and Deepwater, Henry County, Missouri.
5703. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 53, pl. 15, fig. 1;
5705. pl. 16; pl. 17; pl. 18, figs. 1, 2; pl. 19, fig. 3.
5706.
5619. **Sphenopteris (Hymenotheca) broadheadi** David White. Type.
5620. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 41, pl. 13,
figs. 1, 2.
14672. **Sphenopteris canneltonensis** David White. Type.
Allegheny (Penn.). Cannelton, Pennsylvania.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 56.
See *Sphenopteris hymenophylloides*.
5569. **Sphenopteris canneltonensis** David White. Illustrated specimen.
Cherokee, Des Moines (Penn.). Hobb's Coal Mine, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 55, pl. 15, fig. 2.
5662. **Sphenopteris capitata** David White. Type.
Cherokee, Des Moines (Penn.). Near Clinton, Henry
County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 57, pl. 15, fig. 3.
14612. **Sphenopteris chærophyloides** (Brongniart) Presl.
14613. Supplemental types.
Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, I, 1880, p. 270.
14340. **Sphenopteris communis** Lesquereux. Type.
Coal-bearing shale (Penn.). Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 762, pl. 104, fig. 1.
- 14122a. **Sphenopteris coralloides** (Gutbier) Bailey. Illustrated specimen.
Dunkard (Perm.). Cassville, West Virginia.
Lesley, Dictionary Foss. Plants Pa., Geol. Surv. Pa., P 4, III, 1890,
p. 983.
14644. **Sphenopteris cristata** (Brongniart) Presl.
14645. Illustrated specimens.
Pennsylvanian. Rhode Island.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 761, pl. 102, figs. 1, 1a.
14137. **Sphenopteris dissecta** Brongniart. Supplemental type.
Pottsville (Penn.). Carbon Hill Tunnel, Old Forge, Penn-
sylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 836.

8203. **Sphenopteris egyptiaca** Emmons. Type.
Triassic. Egypt, Chatham County, North Carolina.
Emmons, Amer. Geology, VI, 1857, pp. 36, 37, figs. 8, 9.—Fontaine
in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900,
p. 280, pl. 38, fig. 1.
= *Acrostichites egyptiacus*.
30849. **Sphenopteris fremonti** Hall. Type.
Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166),
1845, p. 174.
14397. **Sphenopteris gravenhorstii** var. B Brongniart. Illustrated specimen.
14398. Pottsville (Penn.). Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 763, pl. 101, figs. 1, 1a, 1b.
5380. **Sphenopteris grevillioides** Heer. Illustrated specimen.
Potomac (Low. Cret.). Near mouth of Doag Creek, Mount
Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 359, pl. 2,
fig. 5.
1613. **Sphenopteris guyottii** Lesquereux. Types.
1614. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 137,
pl. 21, figs. 6, 7.
14386. **Sphenopteris harveyi** Lesquereux. Types.
14387. Coal-bearing shale (Penn.). Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 766, pl. 103, fig. 7.
14672. **Sphenopteris hymenophylloides** Brongniart. Illustrated specimen.
Allegheny (Penn.). Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 764, pl. 102, fig. 2.
= *Sphenopteris canneltonensis*.
5661. **Sphenopteris illinoisensis** David White. Types.
5697. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine (?),
Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 58, pl. 19, fig. 4;
pl. 44, fig. 1.
14221. **Sphenopteris inequilateralis** Lesquereux. Type.
Coal-bearing shale (Penn.). Lemon's coal bank, near
Fayetteville, Washington County, Arkansas.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 765, pl. 103, fig. 4.
5802. **Sphenopteris lacoei** David White. Illustrated specimen.
Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 38, pl. 12, fig. 3.

15. **Sphenopteris lakesii** Lesquereux. Type.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. 1878, p. 49,
 pl. 2, fig. 1.
 = *Dryopteris arguta*.
3311. **Sphenopteris latiloba** Fontaine. Types.
 3819 Potomac (Low. Cret.). Fishing hut above Dutch Gap
 to Canal; Fredericksburg; Deep Bottom; near Telegraph
 3821. Station (Fredericksburg area), Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 90, pl. 35, figs. 3-5;
 pl. 36, figs. 4-9; pl. 37, fig. 1.
1360. **Sphenopteris lobifolia** Morris. Illustrated specimen.
 Upper Coal Measures (Penn.). Newcastle, New South
 Wales, Australia.
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 715, Atlas, p. 5, pl. 12,
 fig. 12.
11. **Sphenopteris membranacea** Lesquereux. Type.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 50,
 pl. 2, fig. 2.
 = *Dryopteris arguta*.
5663. **Sphenopteris missouriensis** David White. Type.
 5664. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 43, pl. 14, figs. 1, 2.
14885. **Sphenopteris mixta** Schimper. Illustrated specimens.
 14886. Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 54, fig. 1; Text, I, 1880, p. 276.
5687. **Sphenopteris mixta** Schimper. Illustrated specimens.
 5692. Cherokee, Des Moines (Penn.). Owen's and Hobb's coal
 5712. mines, and Deepwater, Henry County, Missouri.
 5713. White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 35, pl. 11, fig. 3;
 5714. pl. 12, figs. 1, 2; pl. 13, figs. 4, 5.
13. **Sphenopteris nigricans** Lesquereux. Type.
 Denver (Cret.). Golden, Colorado.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 51,
 pl. 2, figs. 4, 5.
14390. **Sphenopteris obovata** Lindley and Hutton. Illustrated specimen.
 Coal-bearing shale (Penn.). Washington County, Arkansas.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P
 Text, III, 1884, p. 769, pl. 103, fig. 6.
14270. **Sphenopteris (Crossotheca) ophioglossoides** (Lesquereux)
 David White. Type.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 62.
 See *Sorocladus ophioglossoides*.

5698. **Sphenopteris (Crossotheca) ophioglossoides** (Lesquereux) David White. Illustrated specimen.
Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 60, pl. 20, figs. 3, 4.
3381. **Sphenopteris pachyphylla** Fontaine. Type.
Potomac (Low. Cret.). Entrance to Trent's Reach, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 93, pl. 50, fig. 5.
30850. **Sphenopteris? paucifolia** Hall. Type.
Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166), 1845, p. 304.
14726. **Sphenopteris (Hymenophyllum) pendula** Lesquereux. Types.
14728. Pottsville (Penn.). Cordova, Alabama.
Lesley, Dictionary Foss. Plants Pa., Geol. Surv. Pa., P 4, III, 1890, p. 988.
5803. **Sphenopteris pinnatifida** (Lesquereux) David White. Illustrated specimens.
5807. Cherokee, Des Moines (Penn.). Pitcher's Coal Mine, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 45, pl. 18, figs. 3, 4.
14304. **Sphenopteris pinnatifida** (Lesquereux) David White. Illustrated specimen.
Cherokee, Des Moines (Penn.). Clinton, Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 45, pl. 19, fig. 1
See *Sphenopteris* (*Hymenophyllites*) *tridactylites*.
14663. **Sphenopteris plicata** Lesquereux. Illustrated specimens.
14664. Allegheny (Penn.). Mazon Creek, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 763, pl. III, fig. 28.
7349. **Sphenopteris plurinervia** Heer? Illustrated specimen.
Lakota (Low. Cret.). South Fork of Hay Creek near Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 657, pl. 160, figs. 19, 20.
19851. **Sphenopteris royi** Lesquereux. Types.
to Walden (Penn.). Rockwood, Tennessee.
19854. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 768, pl. 104, figs. 7-10.
14213. **Sphenopteris solida** Lesquereux. Type.
14214. Allegheny (Penn.). Mazon Creek, Grundy County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 769, pl. 101, fig. 3.
= *Eremopteris solida*.

5649. **Sphenopteris suspecta** David White. Types.
 5650. Cherokee, Des Moines (Penn.). Pitcher's and Owen's coal
 5652. mines, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 51, pl. 35, figs.
 1-3.
6429. **Sphenopteris taffii** David White. Types.
 6430. McAlester (Penn.). One-half mile west of McAlester,
 6742. Indian Territory.
 White, David, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. III,
 1899, p. 485, pl. 67, figs. 7, 7a; pl. 68, fig. 19.
14321. **Sphenopteris tenella** Brongniart. Supplemental type.
 Pennsylvanian. Thayer, Neosho County, Kansas.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 836.
3394. **Sphenopteris thyrsopteroides** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, and at fishing hut
 above Dutch Gap Canal, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 89, pl. 25, fig. 3; pl.
 58, fig. 5.
14132. **Sphenopteris tracyana** Lesquereux. Type.
 Pottsville (Penn.). Tracy City, Tennessee.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 767, pl. 101, fig. 2.
14304. **Sphenopteris (Hymenophyllites) tridactylites** Brongniart.
 Illustrated specimen.
 Cherokee, Des Moines (Penn.). Clinton, Henry County,
 Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 10, pl. 55, figs. 9, 9a, 9b; Text, I, 1880, p. 284.
 =*Sphenopteris pinnatifida*.
2651. **Sphenopteris trifoliata** Hall. Type.
 Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
 Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166), 1845,
 p. 305, pl. 2, figs. 2, 2d.
 =*Thyrsopteris trifoliata*.
2653. **Sphenopteris triloba** Hall. Type.
 Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
 Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166), 1845,
 p. 304, pl. 1, fig. 8.
 =*Thyrsopteris triloba*.
3735. **Sphenopteris valdensis** Heer? Illustrated specimen.
 Trinity (Low. Cret.). Glenrose, Texas.
 Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 263, pl. 36, fig. 2.
5616. **Sphenopteris van ingeni** David White. Type.
 Cherokee, Des Moines (Penn.). Pitcher's Coal Mine,
 Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 47, pl. 13, fig. 3.

5615. **Sphenopteris wardiana** David White. Types.
 5617. Cherokee, Des Moines (Penn.). Pitcher's and Owen's coal
 mines, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 39, pl. 11, figs.
 1, 2.
5654. **Sphenopteris** sp. David White.
 Cherokee, Des Moines (Penn.). Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 66, pl. 35, fig. 6.
3490. **Sphenozamites rogersianus** Fontaine. Types.
 30922. Triassic. Clover Hill, Richmond Coal Field, Virginia.
 30923. Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 80.
3. **Spheria lapidea** Lesquereux. Type.
 Laramie (Cret.). Raton Mountains, New Mexico.
 Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
 p. 373; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 34,
 pl. 1, fig. 3.
 = *Rosellinites lapideus*.
- 19626 **Spirangium intermedium** Lesquereux. Type.
 to Pennsylvanian. Campbells Ledge, Pittston, Pennsylvania.
 19630. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, II, 1880, p. 521.
19649. **Spirangium johnstoni** Kidston. Plastotype.
 Coal Measures. Coseley, near Dudley, England.
 Kidston, Proc. Roy. Phys. Soc. Edinb., IX, p. 11, pl. 1, fig. 6.
19675. **Spirangium multiplicatum** Lesquereux. Type.
 Allegheny (Penn.). Mazon Creek, Illinois.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 16, pl. 75, fig. 11; Text, II, 1880, p. 520.
19651. **Spirangium prendeli** Lesquereux. Types.
 19652. Allegheny (Penn.). Mazon Creek, Grundy County,
 Illinois.
 Lesquereux, Rept. Geol. Surv. Ill., IV, 1870, p. 466, pl. 27, figs. 10,
 12; Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Atlas,
 1879, p. 16, pl. 75, figs. 13, 14; Text, II, 1880, p. 519.
4178. **Spiraxis bivalvis** Ward. Type.
 Fort Union (Tert.). Head of Clear Creek, twenty-four
 miles above Glendive, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 14, pl. 1, fig. 3.
- 25196 **Sporocystis planus** Lesquereux. Types.
 to Pottsville (Penn.). Campbells Ledge, Pittston, Pennsyl-
 25199. vania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 69, fig. 15; Text, II, 1880, p. 458.
387. **Staphylea acuminata** Lesquereux. Types.
 388. Green River (Tert.). Middle Park?, Florissant, Colorado.
 Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
 [1874], p. 415; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, p. 267,
 pl. 48, figs. 4, 5.

17139. **Stemmatopteris anceps** Lesquereux. Types.
 17140. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, *Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 838.
17078. **Stemmatopteris angustata** Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 11, pl. 59, fig. 5; Text, I, 1880, p. 339.
11050. **Stemmatopteris cyclostigma** Lesquereux. Types.
 17088. Anthracite (Penn.). Olyphant, Pennsylvania.
 17089. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 341.
17142. **Stemmatopteris emarginata** Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 337.
17070. **Stemmatopteris hirsuta** Lesquereux. Type.
 Pennsylvanian. Olyphant, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, I, 1880, p. 337.
- 17134 **Stemmatopteris microstigma** Lesquereux. Types.
 to Allegheny (Penn.). Cannelton, Pennsylvania.
 17137. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 838.
17141. **Stemmatopteris mimica** Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 11, pl. 59, fig. 4; Text, I, 1880, p. 341.
17096. **Stemmatopteris polita** Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 11, pl. 59, fig. 6; Text, I, 1880, p. 342.
17073. **Stemmatopteris squamosa** Lesquereux. Type.
 Pennsylvanian. Olyphant, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, p. 11, pl. 59, fig. 2; Text, I, 1880, p. 339.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 112-113, pl. 21,
 fig. 8.
3428. **Sterculia elegans** Fontaine. Type.
 Potomac (Low. Cret.). Deep Bottom, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 314, pl. 157, fig. 2;
 pl. 158, figs. 2, 3.
- 678 **Sterculia lugubris** Lesquereux. Types.
 to Dakota (Cret.). Near Golden, Colorado.
 680. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 81,
 pl. 6, figs. 1-3.

670. *Sterculia obtusiloba* Lesquereux. Type.
Dakota (Cret.). Clay County, Kansas.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 82,
pl. 8, fig. 3.
= *Sterculia tripartita*.
See *Aralia tripartita*.
50117. *Sterculia reticulata* Lesquereux. Type.
Dakota (Cret.). Ten miles northeast of Delphos, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 185, pl. 34, fig. 10.
2698. *Sterculia snowii* Lesquereux. Type.
Dakota (Cret.). Ellsworth County, near Fort Harker,
Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 183, pl. 30, fig. 5;
pl. 31, figs. 2, 3; pl. 32; pl. 33, figs. 1-4.
2745. *Sterculia snowii disjuncta* Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 184, pl. 58, fig. 6.
670. *Sterculia tripartita* (Lesquereux) Knowlton. Type.
Dakota (Cret.). Clay County, Kansas.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 224.
See *Sterculia obtusiloba* and *Aralia tripartita*.
8208. *Strangerites planus* Edmonds. Type.
Triassic. Ellingtons, four miles from Lockville, Chatham
County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 122, fig. 90.
= *Pseudodanæopsis plana*.
See *Pseudodanæopsis reticulata*.
5405. *Tæniocrada chondriformis* (Penhallow) David White. Type.
Upper Chemung (Dev.). Lanesboro, Susquehanna County,
Pennsylvania.
White, N. Y. State Mus., Bull. No. 52, Pal. VI, 1902, p. 604.
See *Haliserites chondriformis*.
25164. *Tæniocrada lesquereuxi* David White. Type.
Erian (Dev.). Factoryville, Wyoming County, Pennsylv-
ania.
White, N. Y. State Mus., Bull. No. 52, Pal. VI, 1902, p. 603.
See *Haliserites dechenianus*.
5409. *Tæniocrada lesquereuxi* David White. Illustrated specimen.
Upper Chemung (Dev.). Lanesboro, Susquehanna County,
Pennsylvania.
White, N. Y. State Mus., Bull. No. 52, Pal. VI, 1902, p. 604.
See *Haliserites dechenianus lineatus*.

19276. *Tæniophyllum brevisfolium* Lesquereux. Type.
 19277. Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Text, III, 1884, p. 788, pl. 108, figs. 3, 3a.
19270. *Tæniophyllum contexam* Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 82, fig. 2; Text, II, 1880, p. 465.
19256. *Tæniophyllum decurrens* Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 81, fig. 1; Text, II, 1880, p. 464.
19252. *Tæniophyllum deflexum* Lesquereux. Type.
 Allegheny (Penn.). Cannelton, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
 Atlas, 1879, pl. 83, fig. 4; Text, II, 1880, p. 465.
6068. *Tæniophyllum latifolium* David White. Types.
 6070. Cherokee, Des Moines (Penn.). Deepwater and Owen's
 Coal Mine, Henry County, Missouri.
 White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 247, pl. 63, fig.
 4; pl. 71.
2205. *Tæniophyllum?* sp. Lesquereux.
 Pennsylvanian. Warrior Creek, Jefferson County, Alabama.
 Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 29.
6940. *Tæniopteris gibbsii* Newberry. Type.
 Puget Sound (Cret.). Point Doughty, Orcas Island,
 Washington.
 Newberry, Boston Journ. Nat. Hist., VII, 1863, p. 512.
 = *Nillsonia gibbsii*.
5556. *Tæniopteris missouriensis* David White. Type.
 to Cherokee, Des Moines (Penn.). Hobb's Coal Mine, and
 5560. Deepwater, Henry County, Missouri.
 White, Bull. Geol. Soc. Amer., IV, 1893, p. 119, pl. 1, figs. 1-7;
 Mon. XXXVII, U. S. Geol. Surv., 1899, p. 140, pl. 40, figs. 1-7.
11699. *Tæniopteris truncata* Lesquereux. Type.
 Pottsville (Penn.). Campbell's Ledge, Pottsville, Pennsylvania.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog.
 Text, III, 1884, p. 743, pl. 94, fig. 8.
25056. *Taonurus colletti* Lesquereux.
 Des Moines? (Penn.). Missouri.
 Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog.
 Atlas, 1879, p. 1, fig. 1.
4289. *Taxites olriki* Heer.
 5095. Fort Union (Tert.
 5158. mouth of J
 Park.
 Knowlton, Mo.
 82, figs. 1

3250. *Taxodium (Glyptostrobus) brookei* ^{Type} ton. Type.
3866. Potomac (Low. Cret.). ^{7th mile up Trent's Reach, Virginia.}
3965. Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, figs. 2-4; pl. 125, figs. 1-3; pl. 126, figs. 4, 7; pl. 127, fig. 1. 228.
 = *Glyptostrobus brookei* ton.
3575. *Taxodium (Glyptostrobus) brookei* ^{Type} ed specimens.
- Potomac (Low. Cret.). ^{7th mile up Trent's Reach, Virginia.}
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 1. 228.
 = *Glyptostrobus brookei*
6935. *Taxodium cuneatum* ^{Type} Type.
6936. Puget Sound (Cret.). ^{near Duwamish River, British Columbia.} Brooke; road-
- Newberry, ^{U. S. Geol. Surv., 1894, p. 110-111, pl. 17.}
- = *Sequoia*
3964. *Taxodium* ^{Type} emental type.
- Potomac (Low. Cret.). ^{7th mile up Trent's Reach, Virginia.} County, Cali-
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 1. Amer., V, 1894,
57. *Taxodium* ^{Illustrated specimen.} County, Cali-
- Green River (Cret.). ^{near Duchesne, Wyoming.} Amer., V, 1894,
- Lawson, ^{U. S. Geol. Surv., 1894, p. 73.}
7086. *Taxodium* ^{Illustrated specimen.} County, Cali-
- Potomac (Low. Cret.). ^{7th mile up Trent's Reach, Virginia.} Amer., V, 1894,
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 6. Surv., 1895, p. 15.
7118. *Taxodium* ^{Illustrated specimen.} Types.
- Potomac (Low. Cret.). ^{7th mile up Trent's Reach, Virginia.} kota.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 2. p. 42; U. S. Geol.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 3. Surv., 1895, p. 15.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 4. Types.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 5. s Reach; fishing
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 6. post, near Brooke;
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 7. p. 131, pl. 44, fig. 4;
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 8. 3, 4; pl. 50, fig. 2; pl.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 9. Type.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 10. burg; fishing hut above
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 11. Trent's Reach; White
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 12. Surv., 1889, pp. 134, 135, pl. 48,
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 13. Types.
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 14. edericksburg; entrance to Trent's
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 15. Dutch
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 16. v., 1889, pp. 139, 140, pl. 53,
- Fontaine, Mon. XV, U. S. Geol. Surv., 1894, p. 131, pl. 124, fig. 17. figs. 2, 5; pl. 57, figs. 1, 5; pl.

3396. **Taxodium (Glyptostrobus) ramosum** Fontaine. Types.
 3864. Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
 3865. ginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 251, pl. 123, figs. 2, 3;
 pl. 124, fig. 2; pl. 127, fig. 1; pl. 132, fig. 1; pl. 146, fig. 1.
3461. **Taxodium (Glyptostrobus) virginicum** Fontaine. Type.
 Potomac (Low. Cret.). Hillside near Potomac Run,
 Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 252, pl. 121, fig. 6.
8552. **Taxodium** sp. Knowlton (aments).
 Mascall beds, Miocene (Tert.). South Fork John Day
 River, Van Horn's Ranch, Oregon.
 Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 27, pl. 1, fig. 6.
304. **Tetranthera sessiliflora** Lesquereux. Illustrated specimen.
 Laramie? (Cret.). Evanston, Wyoming.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 217,
 pl. 35, fig. 8.
 = *Malpoenna sessiliflora*.
 See *Laurus sessiliflora*.
305. **Tetranthera sessiliflora** Lesquereux. Illustrated specimen.
 Livingston (Cret.). Bozeman Coal Field, Montana.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 217,
 pl. 35, fig. 9.
 = *Malpoenna weediana*.
3278. **Thinnfeldia fontainei** Berry. Types.
 3849. Potomac (Low. Cret.). 72d milepost, near Brooke; road-
 side near Potomac Run, Virginia.
 Berry, Bull. Torrey Bot. Club, XXX, 1903, p. 443.
 See *Thinnfeldia variabilis*.
3313. **Thinnfeldia granulata** Fontaine. Type.
 3784. Fishing hut above Dutch Gap Canal; roadside near Potomac
 3848. Run, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 111, pl. 26, figs.
 10-12; pl. 27, figs. 1-5, 8; pl. 169, fig. 1.
5255. **Thinnfeldia lanceolata** Knowlton. Type.
 Laramie (Cret.). Head of Fir Canyon, eight miles east of
 Bozeman, Montana.
 Knowlton, Bull. No. 105, U. S. Geol. Surv., 1894, p. 49, pl. 5, fig. 5.
 = *Protophyllocladus lanceolatus*.
838. **Thinnfeldia montana** Knowlton.
 5256. Types and illustrated specimens.
 to Laramie and Livingston (Cret.). Spring Canyon, near
 5259. Fort Ellis and Bozeman Coal Field, Montana.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 227.
 = *Protophyllocladus polymorphus*.
 See *Thinnfeldia polymorpha* and *Salisburia polymorpha*.

590. **Thinnfeldia subintegrifolia** (Lesquereux) Knowlton. Type.
Dakota (Cret.). Decatur, Nebraska.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 228.
= *Protophylocladus subintegrifolius*.
See *Phyllocladus subintegrifolius*.
- 50108 to 50110. **Thinnfeldia subintegrifolia** (Lesquereux) Knowlton. Illustrated specimens.
Dakota (Cret.). Cloud County, Kansas.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 228.
= *Protophylocladus subintegrifolius*.
See *Phyllocladus subintegrifolius*.
3278. **Thinnfeldia variabilis** Fontaine. Type.
3849. Potomac (Low. Cret.). 72d milepost, near Brooke; road-
side near Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 110-111, pl. 17,
figs. 3-7; pl. 18, figs. 1-6.
= *Thinnfeldia fontainei*.
4006. **Thinnfeldia variabilis?** Fontaine. Supplemental type.
Shasta (Low. Cret.). Near Lowrey, Tehama County, Cali-
fornia.
Fontaine in Diller and Stanton, Bull. Geol. Soc. Amer., V, 1894,
p. 450; in Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 15.
= *Cladophlebis falcata*.
6972. **Thuja interrupta** Newberry. Types.
6978. Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 42; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, pl. 11, figs. 5, 5a; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 25, pl. 26, fig. 5; pl. 27,
figs. 5-5d.
3837. **Thyrsopteris angustifolia** Fontaine. Types.
3389. Potomac (Low. Cret.). Entrance to Trent's Reach; fishing
3938. hut above Dutch Gap Canal; 72d milepost, near Brooke;
hillside near Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 131, pl. 44, fig. 4;
pl. 45, fig. 3; pl. 48, fig. 2; pl. 49, figs. 3, 4; pl. 50, fig. 2; pl.
58, fig. 8.
3218. **Thyrsopteris angustiloba** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; fishing hut above
Dutch Gap Canal; entrance to Trent's Reach; White
House Bluff, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 134, 135, pl. 48,
figs. 3-5; pl. 55, fig. 3.
3193. **Thyrsopteris bella** Fontaine. Types.
3788. Potomac (Low. Cret.). Fredericksburg; entrance to Trent's
3789. Reach; White House Bluff; fishing hut above Dutch
Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 139, 140, pl. 53,
fig. 5; pl. 55, figs. 6, 7; pl. 56, figs. 2, 5; pl. 57, figs. 1, 5; pl.
58, fig. 4.

3412. **Thyrsopteris brevifolia** Fontaine. Type.
Potomac (Low. Cret.). Banks of Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 121, pl. 24, figs. 5, 10.
7335. **Thyrsopteris brevifolia** Fontaine. Illustrated specimens.
7336. Lakota (Low. Cret.). Two miles southeast of Barrett,
7347. Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 660, pl. 161, figs. 10-15.
3413. **Thyrsopteris brevipennis** Fontaine. Types.
3933. Potomac (Low. Cret.). Banks of Dutch Gap Canal; fish-
3936. ing hut above Dutch Gap Canal, Virginia; Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 124, pl. 34, fig. 3; pl. 36, fig. 2; pl. 37, figs. 3, 9; pl. 38, fig. 1; pl. 41, fig. 4.
5963. **Thyrsopteris brevipennis** Fontaine. Illustrated specimen.
Lakota (Low. Cret.). South Fork Hay Creek near Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 662, pl. 162, fig. 1a.
3224. **Thyrsopteris crassinervis** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 130, pl. 41, figs. 1-3.
7352. **Thyrsopteris crassinervis** Fontaine. Illustrated specimen.
Lakota (Low. Cret.). South Fork of Hay Creek near Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 659, pl. 161, figs. 3, 4.
3385. **Thyrsopteris crenata** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 127, pl. 39, figs. 1, 2.
2342. **Thyrsopteris decurrens** Fontaine. Types.
3774. Potomac (Low. Cret.). Banks of Dutch Gap Canal; Fred-
to ericksburg; 72d mile post near Brooke; hillside near
3776. Potomac Run; fishing hut above Dutch Gap Canal,
3778. Virginia.
3786. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 130, pl. 43, fig. 7; pl. 46, figs. 2, 4; pl. 49; figs. 5-7.
3183. **Thyrsopteris densifolia** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 129, pl. 39, fig. 3; pl. 40, figs. 2-5; pl. 41, fig. 5.
3833. **Thyrsopteris dentata** Fontaine. Types.
3190. Potomac (Low. Cret.). Fredericksburg; hillside near Potomac Run; banks of Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 121-122, pl. 24, figs. 4, 6, 7, 9; pl. 25, figs. 1, 2.

7346. *Thyrsopteris dentifolia* Fontaine. Type.
Lakota (Low. Cret.). Two miles southeast of Barrett,
Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 660, pl. 161, figs. 6-9.
3222. *Thyrsopteris distans* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 134, pl. 47, fig. 3;
pl. 54, fig. 8.
3191. *Thyrsopteris divaricata* Fontaine. Types.
3770. Potomac (Low. Cret.). Fishing hut above Dutch Gap
3776. Canal; banks of same canal; Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 125, pl. 37, figs. 5-8;
pl. 170, fig. 1.
3835. *Thyrsopteris elliptica* Fontaine. Types.
3220. Potomac (Low. Cret.). Fredericksburg; banks of Dutch
3977. Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 133, pl. 24, fig. 3;
pl. 46, fig. 1; pl. 50, figs. 6, 7; pl. 51, figs. 4, 6, 7; pl. 54, fig. 6;
pl. 55, fig. 4; pl. 56, figs. 6, 7; pl. 57, fig. 6; pl. 58, fig. 2.
5959. *Thyrsopteris elliptica* Fontaine. Illustrated specimen.
Lakota (Low. Cret.). South Fork Hay Creek near Bar-
rett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 659, pl. 161, fig. 5.
3221. *Thyrsopteris heteroloba* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 139, pl. 53, fig. 4.
3934. *Thyrsopteris heteromorpha* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 136, 137, pl. 52,
fig. 1.
3307. *Thyrsopteris insignis* Fontaine. Types.
3770. Potomac (Low. Cret.). Fredericksburg; roadside near
3834. Potomac Run, Virginia.
3836. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 127, 128, pl. 39,
fig. 4; pl. 40, fig. 1; pl. 41, fig. 6; pl. 42, figs. 1, 2, 3; pl. 43,
figs. 1, 3.
3446. *Thyrsopteris insignis angustipennis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 129, pl. 42, fig. 3;
pl. 43, fig. 2.
3352. *Thyrsopteris meekiana* Fontaine. Types.
3930. Potomac (Low. Cret.). Fredericksburg, and fishing hut
3932. above Dutch Gap Canal, Virginia; Covington street,
Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 125-126, pl. 38,
figs. 2-4, 8; pl. 50, figs. 7, 8; pl. 51, fig. 3.

3310. *Thyrsopteris meekiana angustiloba* Fontaine. Types.
3941. Potomac (Low. Cret.). Baltimore, Maryland; fishing hut
above Dutch Gap Canal; Fredericksburg; 72d milepost,
near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 126, pl. 38, figs. 5-7, 9;
pl. 43, fig. 8; pl. 44, fig. 3; pl. 47, fig. 4; pl. 48, fig. 1; pl. 54,
figs. 2, 11; pl. 55, fig. 1; pl. 56, figs. 1, 3.
3241. *Thyrsopteris microloba* Fontaine. Type.
Potomac (Low. Cret.). Fishing hut above Dutch Gap
Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 140, pl. 57, fig. 4.
3376. *Thyrsopteris microloba alata* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; above Dutch Gap
Canal; near fishing hut, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 140, 141, pl. 55,
fig. 5; pl. 58, fig. 1.
3940. *Thyrsopteris microphylla* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; hillside near
Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 131, 132; pl. 45,
figs. 1, 2, 4, 5.
3192. *Thyrsopteris nervosa* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; hillside near
Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 122, pl. 25, figs. 4,
5, 16; pl. 37, figs. 2, 4; pl. 39, fig. 5; pl. 40, fig. 6.
3345. *Thyrsopteris obtusiloba* Fontaine. Types.
3790. Potomac (Low. Cret.). Red clay ball, banks of Dutch Gap
Canal; hillside near Potomac Run, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 143, pl. 58, figs. 7, 10.
3976. *Thyrsopteris pachyphylla* Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 135, pl. 50, fig. 3.
3217. *Thyrsopteris pachyrachis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg; roadside near
Potomac Run; near Telegraph Station; fishing hut
above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 132, 133, pl. 46,
figs. 3, 5; pl. 47, figs. 1, 2; pl. 49, fig. 1.
7348. *Thyrsopteris pecterooides* Fontaine. Illustrated specimens.
Lakota (Low. Cret.). Two miles southeast of Barrett,
Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 661, pl. 162, figs. 16-19.
3204. *Thyrsopteris pinnatifida* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 136, pl. 51, fig. 2;
pl. 54, figs. 4, 5, 7; pl. 57, fig. 7.

7350. *Thyrsopteris pinnatifida?* Fontaine. Illustrated specimen.
Lakota (Low. Cret.). South Fork of Hay Creek near
Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 658, pl. 161, figs. 1, 2.
3186. *Thyrsopteris rarinervis* Fontaine. Types.
3830 Potomac (Low. Cret.). Fredericksburg; 72d milepost,
to near Brooke; White House Bluff; entrance to Trent's
3832. Reach, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 123-124, pl. 26,
figs. 6, 7; pl. 43, figs. 4-6; pl. 44, figs. 1, 2, 5; pl. 49, fig. 2;
pl. 169, figs. 6, 7.
4003. *Thyrsopteris rarinervis* Fontaine. Illustrated specimen.
Shasta (Low. Cret.). Near Lowrey, Tehama County,
California.
Fontaine in Ward, Mon. XLVIII, U. S. Geol. Surv., 1895, p. 225,
pl. 65, figs. 3, 4.
3219. *Thyrsopteris retusa* Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run (Fred-
ericksburg area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 144, pl. 59, fig. 10.
3401. *Thyrsopteris rhombifolia* Fontaine. Types.
3785. Potomac (Low. Cret.). Fredericksburg; fishing hut above
3787. Dutch Gap Canal, Virginia.
3939. Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 138, pl. 52, fig. 5;
pl. 54, fig. 1.
3445. *Thyrsopteris rhombiloba* Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run
(Fredericksburg area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 144, pl. 59, figs. 6, 7;
pl. 60, fig. 8.
3223. *Thyrsopteris sphenopteroides* Fontaine. Types.
3934. Potomac (Low. Cret.). Hillside near Potomac Run, Vir-
3937. ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 143, pl. 58, fig. 6.
3443. *Thyrsopteris squarrosa* Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run; near
Telegraph Station (Fredericksburg area), Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 143, pl. 59, fig. 3.
2651. *Thyrsopteris trifoliata* (Hall) Lesquereux. Type.
Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 38.
See *Sphenopteris trifoliata*.
2653. *Thyrsopteris triloba* (Hall) Lesquereux. Type.
Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 38.
See *Sphenopteris triloba*.

3451. **Thyrsopteris varians** Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 137, pl. 52, figs. 2-4;
pl. 53, figs. 1-3; pl. 54, fig. 10; pl. 57, fig. 2.
559. **Tilia antiqua** Newberry. Types.
6965. Fort Union (Tert.). Near Fort Clarke, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 52; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, figs. 1, 2.
= *Viburnum antiquum*.
6168. **Titanophyllum brittsii** David White. Type.
Cherokee, Des Moines (Penn.). Near Jordan's Coal Mine,
Henry County, Missouri.
White, Mon. XXXVII, U. S. Geol. Surv., 1899, p. 271.
1617. **Tmesipteris alleni** (Lesquereux) Hollick. Type.
Green River (Tert.). Florissant (South Park), Colorado.
Hollick, Bull. Torr. Bot. Club, XXI, p. 256, 1894, pl. 205, fig. 12.
See *Salvinia alleni* and *Ophioglossum alleni*.
662. **Todia saportanea** Lesquereux. Types.
to Dakota (Cret.). Southern Kansas.
664. Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 48,
pl. 29, figs. 1, 3, 4.
= *Lomatia?* *saportanea*.
3435. **Torreya falcata** Fontaine. Type.
Potomac (Low. Cret.). Hillside near Potomac Run, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 235, pl. 113, fig. 4.
= *Tumion falcatum*.
681. **Torreya oblanceolata** Lesquereux. Type.
Dakota? (Cret.). Near Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 30, pl. 1, fig. 2.
= *Tumion oblanceolatum*.
3455. **Torreya virginica** Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Vir-
ginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 234, 235, pl. 109,
fig. 8.
= *Tumion virginicum*.
- 7629a. **Trapa americana** Knowlton. Type.
Payette (Miocene). Idaho City, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 733, pl. 102, fig. 7a.
7655. **Trapa cuneata** Knowlton. Type.
Montana (Cret.). Point of Rocks, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 64, pl. 5, fig. 6.

- 547a. *Trapa? microphylla* Lesquereux. Types.
867. Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 295,
pl. 61, figs. 17, 18.
5120. *Trapa? microphylla* Lesquereux. Illustrated specimens.
5121. Laramie (Cret.). North of Pinyon Peak, on Wolverine
Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 661, pl. 77,
figs. 3, 4.
5317. *Trapa? microphylla* Lesquereux. Illustrated specimens.
to Fort Union (Tert.). Burns's Ranch, below Glendive,
5319. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 64, pl. 28, figs. 3-5.
- 7629b. *Trapa? occidentalis* Knowlton. Type.
Payette, Miocene (Tert.). Idaho City, Idaho.
Knowlton, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898,
p. 734, pl. 102, fig. 7b.
2652. *Trichopteris gracilis* Hall. Type.
Jurassic? or Lower Cretaceous. Uinta County, Wyoming.
Hall in Fremont, Expl. Exped. to the Rocky Mts. (Doc. 166), 1845,
p. 307, pl. 1, fig. 5.
16727. *Trigonocarpum adamsii* Lesquereux. Types.
to Pennsylvanian. Stark County, Illinois.
16733. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 820, pl. 110, figs. 51-57.
26536. *Trigonocarpum ampullæformis* Lesquereux. Types.
to Pottsville (Penn.). Washington County, Arkansas, and
26538. Tracy City, Tennessee.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 823, pl. 109, figs. 18, 19, 21.
26137. *Trigonocarpum dawesii* Lindley and Hutton.
Illustrated specimens.
Pennsylvanian. Cannelton, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 18, pl. 85, fig. 25; Text, II, 1880, p. 586.
26138. *Trigonocarpum dawesii* Lindley and Hutton.
to Illustrated specimens.
26140. Pennsylvanian. Stark County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 821, pl. 111, figs. 4-6.
26755. *Trigonocarpum giffordi* Lesquereux. Type.
Pennsylvanian. Near Alta, Peoria County, Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas 1879, p. 17, pl. 85, figs. 5, 6; Text, II, 1880, p. 592.
26018. *Trigonocarpum grandis* Lesquereux. Types.
to Pennsylvanian. Stark County, Illinois.
26020. Lesquereux, Coal Flora, Second Geol. Surv., Pa., Rept. Prog. P,
Text, III, 1884, p. 821, pl. 111, figs. 1, 2, 3.

26268. **Trigonocarpum helenæ** David White. Type.
Pottsville (Penn.). Helena, Alabama.
White, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 909.
See *Rhabdocarpus clavatus*.
- 26999 **Trigonocarpum kansaseanus** Lesquereux. Types.
to Missouriian (Penn.). Osage, Kansas.
27002. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 822.
- 26982 **Trigonocarpum perpusillus** Lesquereux. Types.
to Pennsylvanian. Stark County, Illinois.
26985. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 820, pl. 110, figs. 58, 59, 59a, 61.
- 26006 **Trigonocarpum schultzianus** Goepfert and Berger. Illustrated specimens.
to Pennsylvanian. Stark County, Illinois.
26008. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 819, pl. 110, figs. 63, 64, 65.
- 26865 **Trigonocarpum starkianus** Lesquereux. Types.
to Pennsylvanian. Stark County, Illinois.
26871. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 822, pl. 111, figs. 7-13.
- Trigonocarpus*. See *Trigonocarpum*.
1295. **Triphyllopteris alleghanensis** Fontaine and I. C. White. Type.
Pocono (Miss.). Lewis Tunnel, West Virginia.
Fontaine and White, Second Geol. Surv. Pa., Rept. P. Prog., 1880,
p. 6.
See *Cyclopteris (Archæopteris) alleghanensis*.
2190. **Triphyllopteris lescuriana (Meek)** Lesquereux. Type.
Pocono (Miss.). Lewis Tunnel, West Virginia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, I,
1880, p. 297; Atlas, pl. 50, fig. 6.
See *Cyclopteris? (Archæopteris) lescuriana*.
2008. **Triphyllopteris virginiana** Meek. Type.
Pocono (Miss.). Lewis Tunnel, West Virginia.
Meek, Bull. Phil. Soc. Washington, II, 1875-1880; Appendix, p. 43.
See *Cyclopteris virginiesis*.
16643. **Trochophyllum clavatum** Lesquereux. Type.
Monongahela? (Penn.). Near Pittsburg, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 2, pl. 3, figs. 21-23; Text, I, 1880, p. 65.
= *Sigillariostrobus clavatus*.
3435. **Tumion falcatum (Fontaine)** Knowlton. Type.
Potomac (Low. Cret.). Hillside near Potomac Run, Vir-
ginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 234.
See *Torreya falcata*.

681. *Tumion oblaceolatum* (Lesquereux) Knowlton. Type.
Dakota? (Cret.). Near Golden, Colorado.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 234.
See *Torreya oblaceolata*.
3455. *Tumion virginicum* (Fontaine) Knowlton. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 234.
See *Torreya virginica*.
1569. *Typha latissima* Al. Braun. Illustrated specimen.
Green River (Tert.). Uinta County, Wyoming, northeast
of Randolph, Utah.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 141, pl. 23, fig. 4.
Ulmiphyllum. See *Ulmophyllum*.
3298. *Ulmophyllum brookense* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 312, 313, pl. 155,
fig. 8; pl. 163, fig. 7.
3299. *Ulmophyllum crassinerve* Fontaine. Type.
Potomac (Low. Cret.). Deep Bottom, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 313, pl. 158, figs. 6, 7.
7410. *Ulmophyllum densinerve* Fontaine. Type.
Lakota (Low. Cret.). Rollins Tunnel, near Robbin's
Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
p. 689, pl. 169, fig. 7.
3303. *Ulmophyllum tenuinerve* Fontaine. Type.
Potomac (Low. Cret.). 72d milepost, near Brooke, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 313, pl. 158, fig. 1.
1738. *Ulmus braunii* Heer. Illustrated specimens.
1739. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 161,
pl. 27, fig. 3.
1740. *Ulmus hilliæ* Lesquereux. Types.
1741. Green River (Tert.) Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883,
p. 160, pl. 28, figs. 1, 2.
296. *Ulmus irregularis* Lesquereux. Types.
297. Denver (Cret.). Golden, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1872
[1873], p. 378.
= *Ficus irregularis*.
4111. *Ulmus minima* Ward. Types.
4112. Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 45, pl. 23, figs. 3, 4.

8493. *Ulmus newberryi* Knowlton. Type.
Upper Eocene (Tert.). Bridge Creek, Crook County, Oregon.
Knowlton, Bull. No. 204, U. S. Geol. Surv., 1902, p. 54, pl. 9, fig. 4.
4114. *Ulmus orbicularis* Ward. Type.
Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 46, pl. 23, fig. 6.
7567. *Ulmus oregoniana* Knowlton. Types.
7568. Miocene (Tert.). Five miles north of Ashland, Oregon.
Knowlton, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. III, 1900,
p. 44, pl. 2, figs. 1, 2.
4115. *Ulmus planeroides* Ward. Type.
4116. Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 44, pl. 23, figs. 1, 2.
5189. *Ulmus pseudo-fulva*? Lesquereux. Illustrated specimen.
Miocene (Tert.). Lamar River, between Cache and Calfee
creeks, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 711, pl. 88,
fig. 2.
8590. *Ulmus racemosa* Thomas. Supplemental type.
Interglacial (Pleistocene). Morgantown, West Virginia.
Knowlton in I. C. White, Amer. Geol. XVIII, 1896, p. 371.
4113. *Ulmus rhamnifolia* Ward. Type.
Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 45, pl. 23, fig. 5.
7064. *Ulmus speciosa* Newberry. Types.
to Upper Eocene (Tert.). Bridge Creek, Crook County,
7068. Oregon.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 507; Mon. XXXV, U. S.
Geol. Surv., 1898, p. 80, pl. 45, figs. 2-4, 7, 8.
231. *Ulmus tenuinervis* Lesquereux. Types.
233. Green River (Tert.). Middle Park?, Florissant, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 412; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 188, pl. 26, figs. 1-3.
5190. *Ulmus* sp. Knowlton (fruits of).
Fort Union (Tert.). Top of bluff, Yellowstone River, one-half
mile below mouth of Elk Creek, Yellowstone National
Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 712,
pl. 88, figs. 3, 4.
15823. *Ulodendron ellipticum* Presl. Illustrated specimen.
Allegheny (Penn.). Morris, Illinois.
Lesquereux, Rept. Geol. Survey Illinois, IV, 1870, p. 436, pl. 23,
figs. 1, 3; Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Atlas, 1879, p. 11, pl. 65, figs. 2, 3, 3a; Text, II, 1880, p. 404.

30077. **Vaccinium alaskanum** Knowlton. Types.
Eocene (Tert.). Kukak Bay, Alaska.
Knowlton, Harriman Alaska Exped., IV, 1904, p. 157, pl. 25, fig. 1.
2357. **Vaccinium coloradense** Lesquereux. Type.
Denver (Cret.). Silver Cliff, Colorado.
Lesquereux, Proc. U. S. Nat. Mus., X, 1887, p. 42, pl. 3, figs. 4, 5.
5998. **Viburnites evansanus** Ward. Types.
6000. Dakota (Cret.). Evans's quarry, Minnekahta Creek, four miles below Hot Springs, South Dakota.
Ward, Journ. Geol., II, 1894, pp. 261, 262; Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 709, pl. 172, figs. 3, 4.
326. **Viburnum anceps** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 227, pl. 38, fig. 11.
= *Platanus rhomboidea*.
328. **Viburnum anomalum** Knowlton. Type.
Montana (Cret.). Point of Rocks, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 72.
See *Viburnum rotundifolium*.
559. **Viburnum antiquum** (Newberry) Hollick. Types.
6965. Fort Union (Tert.). Near Fort Clarke, North Dakota.
Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 128, pl. 33, figs. 1, 2.
See *Tilia antiqua*.
4027. **Viburnum antiquum** (Newberry) Hollick. See *Viburnum tilioides*. (Also catalogue numbers 4036, 4151, 5302, 5303.)
563. **Viburnum asperum** Newberry. Types.
Fort Union (Tert.). Fort Union, Buford County, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 54.
6984. **Viburnum asperum** Newberry. Illustrated specimen.
Fort Union (Tert.). Fort Union, Buford County, North Dakota.
Newberry, U. S. Geol. Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, fig. 9.
= *Rhamnites concinnus*.
4018. **Viburnum asperum** Newberry. Illustrated specimens.
to Fort Union (Tert.). Cracker Box Creek and Seven Mile
4023. Creek, near Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 113, pl. 55, figs. 4-9.
4049. **Viburnum betulæfolium** Ward. Type.
Fort Union (Tert.). Burns's Ranch, twelve miles above
Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 114, pl. 57, fig. 4.

533. **Viburnum contortum** Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873],
p. 396.
= *Viburnum marginatum*.
7001. **Viburnum cuneatum** Newberry. Type.
Eocene? (Tert.). Tongue River, Custer County, Montana.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 511; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 130, pl. 57, fig. 2.
2026. **Viburnum dakotense** Lesquereux. Type.
Fort Union (Tert.). Bad Lands, Dakota.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 231,
pl. 46a, fig. 9.
323. **Viburnum dichotomum** Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1872 [1873], p. 399;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 225, pl. 38,
fig. 6.
4045. **Viburnum elongatum** Ward. Types.
4046. Fort Union (Tert.). Clear Creek, fifteen miles above Glen-
dive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 112, pl. 54, figs. 4, 5.
5363. **Viburnum erectum** Ward. Type.
Fort Union (Tert.). Clear Creek, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 112, pl. 55, fig. 3.
4050. **Viburnum finale** Ward. Type.
Fort Union (Tert.). Iron Bluff, twelve miles above Glen-
dive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 115, pl. 57, fig. 5.
494. **Viburnum goldianum** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 227,
pl. 60, figs. 2, 2a.
319. **Viburnum lakesii** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 226,
pl. 37, fig. 13.
562. **Viburnum lanceolatum** Newberry. Types.
580. Fort Union (Tert.). Fort Union, North Dakota.
Newberry, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, p. 54; U. S. Geol.
Surv. Terr., Ills. Cret. and Tert. Plants, 1878, pl. 16, fig. 10; Mon.
XXXV, U. S. Geol. Surv., 1898, p. 131, pl. 33, fig. 10.
2701. **Viburnum lesquereuxii longifolium** Lesquereux. Type.
2701½. Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 122, pl. 53,
figs. 1, 3.

50065. **Viburnum lesquereuxii tenuifolium** Lesquereux. Type.
Dakota (Cret.). Ellsworth County, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1892, p. 123, pl. 64,
fig. 13.
- 4011 **Viburnum limpидum** Ward. Types.
4024 Fort Union (Tert.). Clear Creek, Montana.
to Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 110, pl. 53, figs. 3-6.
4026.
5375. **Viburnum macrodontum** Ward. Type.
Fort Union (Tert.). Clear Creek, above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 110, pl. 53, fig. 2.
- 320 **Viburnum marginatum** Lesquereux. Type.
to Laramie (Cret.). Black Buttes, Wyoming.
322a. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 223,
533. pl. 37, fig. 11; pl. 38, figs. 2-5.
320 = *Viburnum problematicum*.
321, 322, 322a = *Platanus marginata*.
See *Viburnum contortum*.
- 4037 **Viburnum newberrianum** Ward. Types.
to Fort Union (Tert.). Crackerbox Creek, eighteen miles
4042. above Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 113, pl. 56, figs. 1-6.
2024. **Viburnum nordenskiöldi** Heer. Illustrated specimen.
Fort Union (Tert.). Bad Lands, Dakota.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 230,
pl. 46a, figs. 6, 7.
4015. **Viburnum nordenskiöldi** Heer. Illustrated specimen.
Fort Union (Tert.). Clear Creek, fifteen miles above Glen-
dive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 114, pl. 57, fig. 1.
4016. **Viburnum nordenskiöldi** Heer. Illustrated specimen.
Fort Union (Tert.). Little Missouri River, North Dakota.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 114, pl. 57, fig. 3.
4017. **Viburnum nordenskiöldi** Heer. Illustrated specimen.
Fort Union (Tert.). Gladstone, North Dakota.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 114, pl. 57, fig. 2.
4043. **Viburnum oppositinerve** Ward. Types.
4044. Fort Union (Tert.). Clear Creek, fifteen miles above Glen-
dive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 112, pl. 55, figs. 1, 2.
- 4012 **Viburnum perfectum** Ward. Types.
to Fort Union (Tert.). Clear Creek, fifteen miles above Glen-
4014. dive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 109, pl. 52, figs. 3, 4;
pl. 53, fig. 1.

4047. **Viburnum perplexum** Ward. Types,
4048. Fort Union (Tert.). Burns's Ranch, below Glendive,
Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 111, pl. 54, figs. 2, 3.
327. **Viburnum platanoides** Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr. VII, Pt. II, 1878, p. 224,
pl. 38, fig. 8.
= *Platanus platanoides*.
320. **Viburnum? problematicum** Knowlton. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 71.
See *Viburnum marginatum*.
318. **Viburnum rotundifolium** Lesquereux. Types.
325. Montana and Laramie (Cret.) Point of Rocks and Black
328. Buttes, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. Surv. Terr., 1874 [1876], p. 305;
Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 225, pl. 37,
fig. 12; pl. 38, fig. 10; pl. 61, fig. 22.
328 = *Viburnum anomalum*.
- 5112 **Viburnum rotundifolium** Lesquereux. Illustrated specimens.
to Laramie (Cret.). North of Pinyon Peak, on Wolverine
5115. Creek, Yellowstone National Park.
Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 662,
pl. 77, fig. 10; pl. 78, figs. 2, 8, 9.
4027. **Viburnum tilioides** Ward. Types.
4036. Fort Union (Tert.). Clear Creek, Montana.
4151. Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 107, pl. 51, figs. 1, 3, 8;
5302. pl. 52, fig. 2.
5303. = *Viburnum antiquum*.
4152. **Viburnum whymperi** Heer. Illustrated specimen.
Fort Union (Tert.). Clear Creek, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 111, pl. 54, fig. 1.
324. **Viburnum whymperi?** Heer. Illustrated specimens.
329. Montana (Cret.). Black Buttes and Point of Rocks, Wyo-
ming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 225,
pl. 38, fig. 7; pl. 61, fig. 23.
3454. **Vitiphyllum crassifolium** Fontaine. Type.
Potomac (Low. Cret.). Roadside near Potomac Run,
Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 308, pl. 150, figs. 9, 10.
3194. **Vitiphyllum multifidum** Fontaine. Type.
Potomac (Low. Cret.). Belt and Covington streets, Balti-
more, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 309, pl. 173, figs. 1-9.

3951. *Vitiphyllum parvifolium* Fontaine. Type.
Potomac (Low. Cret.). Belt and Covington streets, Baltimore, Maryland.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 309, pl. 172, figs. 11, 12.
4184. *Vitis bruneri* Ward. Types.
4185. Laramie (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 69, pl. 32, figs. 1, 2.
4186. *Vitis bruneri* Ward. Illustrated specimen.
Laramie (Cret.). Carbon Station, Wyoming.
Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 241.
See *Vitis carbonensis*.
4186. *Vitis carbonensis* Ward. Type.
Laramie (Cret.). Carbon Station, Wyoming.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 70, pl. 32, fig. 3.
= *Vitis bruneri*.
4189. *Vitis cuspidata* Ward. Types.
4190. Fort Union (Tert.). Burns's Ranch and Seven Mile Creek,
4191. Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 71, pl. 32, figs. 6-8.
351. *Vitis olriki* Heer. Illustrated specimen.
Laramie? (Cret.). Evanston, Wyoming.
Lesquereux, Suppl. Fifth Ann. Rept. U. S. Geol. Surv. Terr., 1871
[1872], p. 12; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878,
p. 241, pl. 41, fig. 8.
7115. *Vitis rotundifolia* Newberry. Type.
7116. Tertiary (Eocene). Cook Inlet, Alaska.
Newberry, Proc. U. S. Nat. Mus., V, 1883, p. 513; Mon. XXXV,
U. S. Geol. Surv., 1898, p. 120, pl. 51, fig. 2; pl. 53, fig. 3.
513. *Vitis sparsa* Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 241,
pl. 60, fig. 24.
4187. *Vitis xantholithensis* Ward. Types.
4188. Fort Union (Tert.). Burns's Ranch, below Glendive, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 71, pl. 32, figs. 4, 5.
8091. *Volkmania crassa* Lesquereux. Types.
8092. Pottsville (Penn.). Dade County, Georgia.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 719, pl. 90, fig. 1.
17772. *Volkmania fertilis* Lesquereux. Types.
to Pennsylvania, Archbald, Pennsylvania, and Stark County,
17775. Illinois.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P,
Text, III, 1884, p. 720, pl. 90, fig. 4.

18425. **Volkmania prælonga** Lesquereux. Type.
Anthracite (Penn.). Pleasant Valley, near Pittston, Pennsylvania.
Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 720, pl. 90, fig. 2.
8241. **Walchia brevifolia** Emmons. Type.
Triassic. Lockville, Chatham County, North Carolina.
Emmons, Amer. Geology, VI, 1857, p. 107, fig. 74.
= *Palissya brevifolia*.
See *Cheirolepis muensteri*.
8235. **Walchia longifolius** Emmons. Types.
8236. Triassic. Lockville, Chatham County, North Carolina.
Emmons, Geol. Rept. Midland Counties of North Carolina, 1856 p. 333.
= *Palissya sphenolepis*.
See *Palissya braunii*.
8243. **Walchia variabilis** Emmons. Type.
Triassic. Turners Falls, Massachusetts.
Emmons, Amer. Geology, VI, 1857, p. 108, fig. 76.
= *Pagiophyllum peregrinum*.
See *Pachyphyllum peregrinum*.
7408. **Weichselia reticulata** (Stokes and Webb) Ward. Illustrated specimens.
7412. Lakota (Low. Cret.). Rollins Tunnel, near Robbins's Ranch, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 651, pl. 160, figs. 2, 4.
1820. **Weinmannia haydenii** Lesquereux. Illustrated specimens.
to Green River (Tert.). Florissant, Colorado.
1824. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 178,
1827. pl. 42, figs. 1-7.
1828.
1805. **Weinmannia integrifolia** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1812. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 178,
1810. pl. 42, figs. 8-13.
1813. **Weinmannia obtusifolia** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1819. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 178,
pl. 41, figs. 4-7, 9, 10.
358. **Weinmannia rosæfolia** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
360. Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 415.
= *Rhus rosæfolia*.

- 18880 **Whittleseya microphylla** Lesquereux. Types.
to Pottsville (Penn.). Washington County, Arkansas.
18882. Lesquereux, Coal Flora, Second Geol. Surv. Pa., Rept. Prog. P, Text, III, 1884, p. 843.—Lesley, Dictionary Foss. Plants Pa., Geol. Surv. Pa., P 4, III, 1890, p. 1526.
85. **Widdringtonia ? complanata** Lesquereux. Types.
86. Montana (Cret.). Point of Rocks, Wyoming.
Lesquereux, Bull. U. S. Geol. and Geogr. Surv. Terr., I, 1875 [1876], p. 336; Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874 [1876], p. 299; *ibid.*, 1876 [1878], p. 499; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 72, pl. 62, figs. 13, 14.
58. **Widdringtonia linguæfolia** Lesquereux. Type.
1621. Green River (Tert.). Florissant, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 139, pl. 21, figs. 14, 14a.
See *Glyptostrobus europæus*.
7360. **Williamsonia ? phœnicopsoides** Ward. Type.
Lakota (Low. Cret.). South Fork of Hay Creek, near Barrett, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 668, pl. 162, fig. 20.
3753. **Williamsonia texana** Fontaine. Type.
Trinity (Low. Cret.). Glenrose, Texas.
Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 278, pl. 43, figs. 1, 2.
- 3404.. **Williamsonia virginiensis** Fontaine. Type.
Potomac (Low. Cret.). Entrance to Trent's Reach; fishing hut above Dutch Gap Canal, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 273, pl. 133, figs. 5-7; pl. 165, fig. 5.
10. **Woodwardia latiloba** Lesquereux. Types.
28. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 54, pl. 3, figs. 1, 1a.
117. **Woodwardia latiloba minor** Lesquereux. Type.
Laramie (Cret.). Black Buttes, Wyoming.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873 [1874], p. 391; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 54, pl. 4, fig. 9.
7640. **Woodwardia** sp. Knowlton.
7672. Montana (Cret.). North Fork Dutton Creek, Albany? County, Wyoming.
Knowlton, Bull. No. 163, U. S. Geol. Surv., 1900, p. 23, pl. 3, fig. 9.
5381. **Zamia washingtoniana** Ward. Type.
Potomac (Low. Cret.). Near mouth of Doag Creek, Mount Vernon, Virginia.
Ward, Fifteenth Ann. Rept. U. S. Geol. Surv., 1895, p. 350, pl. 2, fig. 6.

3182. *Zamiopsis insignis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 162, 163, pl. 62, fig. 3; pl. 64, figs. 1, 3; pl. 65, figs. 4-6; pl. 66, fig. 2; pl. 67, fig. 7.
3422. *Zamiopsis laciniata* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 164, 165, pl. 66, figs. 1, 5-8.
3292. *Zamiopsis longipennis* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 164, pl. 61, fig. 8.
3431. *Zamiopsis petiolata* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 166, pl. 66, fig. 3.
3328. *Zamiopsis pinnatifida* Fontaine. Type.
Potomac (Low. Cret.). Fredericksburg, Virginia.
Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 161, 162, pl. 61, fig. 7; pl. 62, fig. 5; pl. 64, fig. 2; pl. 67, fig. 2.
8232. *Zamiostrobus emmonsi* Fontaine. Type.
Triassic. Chatham County, North Carolina.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 117, pl. 52, fig. 5.
= *Cycadeoidea emmonsi*.
100. *Zamiostrobus mirabilis* Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1874 [1876], p. 309; Bull. U. S. Geol. and Geogr. Surv. Terr., 1, 2d ser. No. 5, 1875 [1876], p. 383; Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 70, pl. 63, figs. 1-1d.
= *Cycadeoidea mirabilis*.
30973. *Zamiostrobus virginienis* Fontaine. Types.
30974. Triassic. Gowry shaft, near Midlothian, Richmond Coal Field, Virginia.
Fontaine, Mon. VI, U. S. Geol. Surv., 1883, p. 85, pl. 47, figs. 4, 5.
8231. *Zamiostrobus virginienis* Fontaine. Illustrated specimen.
Triassic. Chatham County, North Carolina.
Fontaine in Ward, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 301, pl. 43, fig. 2.
2622. *Zamites alaskana* Lesquereux. Type.
Neocomian (Cret.). Cape Lisburne, Alaska.
Lesquereux, Proc. U. S. Nat. Mus., XI, 1888, p. 32, pl. 10, fig. 4.
= *Podozamites distantinervis*.
7331. *Zamites borealis* Heer. Illustrated specimen.
Lakota (Low. Cret.). Webster's Ranch, northeast of Beulah, Crook County, Wyoming.
Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899, p. 666, pl. 162, fig. 14.

7378. **Zamites brevipennis** Heer. Illustrated specimen.
 7379. Lakota (Low. Cret.). John Barr's tunnel, north of forks
 of Hay Creek, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 665, pl. 162, figs. 10-13.
3315. **Zamites crassinervis** Fontaine. Type.
 3956. Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 172, pl. 69, fig. 4;
 pl. 83, fig. 3.
3370. **Zamites distantinervis** Fontaine. Type.
 Potomac (Low. Cret.). Fredericksburg, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 172, pl. 83, fig. 4.
8218. **Zamites graminoides** Emmons. Type.
 Triassic. Chatham County, North Carolina.
 Emmons, Geol. Rept. Midland Counties North Carolina, 1856,
 p. 330, pl. 4, fig. 11.
 = *Ctenophyllum braunianum angustum*.
3387. **Zamites ovalis** Fontaine. Type.
 Potomac (Low. Cret.). Banks Dutch Gap Canal; fishing
 hut above canal; roadside near Potomac Run; near
 Telegraph Station, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 173, pl. 85, fig. 4;
 pl. 170, fig. 3.
2879. **Zamites powelli** Fontaine. Illustrated specimen.
 Triassic. Copper mines near Albiquiu, New Mexico.
 Fontaine (in Fontaine and Knowlton), Proc. U. S. Nat. Mus., XIII,
 1890, p. 284, pl. 25, fig. 5; pl. 26, figs. 7, 8.
3420. **Zamites subfalcatus** Fontaine. Type.
 Potomac (Low. Cret.). Kankeys, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, p. 173, pl. 84, fig. 13;
 pl. 85, fig. 3.
3276. **Zamites tenuinervis** Fontaine. Type.
 3792. Potomac (Low. Cret.). Fredericksburg; Kankeys; banks
 of Dutch Gap Canal; fishing hut above canal; tele-
 graph station, Virginia.
 Fontaine, Mon. XV, U. S. Geol. Surv., 1889, pp. 171, 172, pl. 67,
 fig. 1; pl. 69, fig. 2; pl. 70, fig. 1; pl. 75, fig. 3; pl. 76, fig. 7; pl. 78,
 fig. 6; pl. 84, fig. 7.
3742. **Zamites tenuinervis** Fontaine. Illustrated specimen.
 Trinity (Low. Cret.). Glenrose, Texas.
 Fontaine, Proc. U. S. Nat. Mus., XVI, 1893, p. 267, pl. 37, figs. 3, 4;
 pl. 38, fig. 1.
5982. **Zamites** sp. Fontaine. Illustrated specimen.
 Lakota (Low. Cret.). Cliff near Robbins's Ranch on Oak
 Creek, Crook County, Wyoming.
 Fontaine, Nineteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1899,
 p. 666, pl. 162, fig. 15.

480. **Zanthoxylon judlandinum** Al. Braun. Illustrated specimen.
Eocene? (Tert.). Washakie, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 294,
pl. 58, fig. 10.
- 1904 **Zanthoxylon spireæfolium** Lesquereux. Types.
to Green River (Tert.). Florissant, Colorado.
1907. Lesquereux, Rept. U. S. Geol. Surv. Terr., VIII, Pt. III, 1883, p. 196,
pl. 40, figs. 1-3.
136. **Zingiberites dubius** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 95,
pl. 16, fig. 1.
See *Zingiberites? undulatus*.
136. **Zingiberites? undulatus** Lesquereux. Type.
Denver (Cret.). Golden, Colorado.
Lesquereux, Ann. Rept. U. S. Geol. and Geogr. Surv. Terr., 1873
[1874], p. 396.
= *Zingiberites dubius*.
431. **Zizyphus cinnamomoides** Lesquereux. Type.
Green River (Tert.). Green River Station, Wyoming.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 277,
pl. 52, fig. 8.
See *Ceanothus cinnamomoides*.
4183. **Zizyphus cinnamomoides** Lesquereux. Illustrated specimen.
Fort Union (Tert.). Seven Mile Creek, Montana.
Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 74, pl. 33, fig. 7.
2709. **Zizyphus dakotensis** Lesquereux. Type.
Dakota (Cret.). Near Fort Harker, Kansas.
Lesquereux, Mon. XVII, U. S. Geol. Surv., 1891, p. 167, pl. 36.
434. **Zizyphus distortus** Lesquereux. Types.
435. Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 275,
pl. 51, figs. 8, 9.
- 425 **Zizyphus fibrillosus** Lesquereux. Types.
to Denver (Cret.). Golden, Colorado.
430. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 276,
pl. 52, figs. 1-6.
See *Ceanothus fibrillosus*.
424. **Zizyphus hyperboreus?** Heer. Illustrated specimen.
Denver (Cret.). Golden, Colorado.
Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 276,
pl. 51, fig. 15.
= *Zizyphus lesquereuxii*.

424. *Zizyphus lesquereuxii* Knowlton. Type.
 Denver (Cret.). Golden, Colorado.
 Knowlton, Bull. No. 152, U. S. Geol. Surv., 1898, p. 246.
 See *Zizyphus hyperboreus*?
- 7020 *Zizyphus longifolia* Newberry. Types.
 to Green River (Tert.). Green River, Sweetwater County,
 7022. Wyoming.
 Newberry, Mon. XXXV, U. S. Geol. Surv., 1898, p. 119, pl. 65,
 figs. 3-5.
- 419 *Zizyphus meekii* Lesquereux. Types.
 to Laramie (Cret.). Carbon and Black Buttes, Wyoming.
 423. Lesquereux, Rept. U. S. Geol. Surv. Terr., VII, Pt. II, 1878, p. 275,
 pl. 51, figs. 10-14.
4181. *Zizyphus meekii* Lesquereux. Illustrated specimen.
 Livingston (Cret.). Bozeman coal mines, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 74, pl. 33, fig. 6.
4182. *Zizyphus meekii* Lesquereux. Illustrated specimen.
 Laramie? (Cret.). Carbon Station, Wyoming.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 74, pl. 33, fig. 5.
4179. *Zizyphus serrulatus* Ward. Type.
 4180. Fort Union (Tert.). Burns's Ranch, Montana.
 Ward, Bull. No. 37, U. S. Geol. Surv., 1887, p. 73, pl. 33, figs. 3, 4.
4351. *Zizyphus serrulatus* Ward. Illustrated specimen.
 Fort Union (Tert.). Yellowstone River, one-half mile below
 mouth of Elk Creek, top of bluff, Yellowstone National
 Park.
 Knowlton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 740,
 pl. 101, figs. 1, 2.
3765. *Zizyphus townsendi* Knowlton. Type.
 Eocene? (Tert.). Herendeen Bay, Alaska.
 Knowlton, Proc. U. S. Nat. Mus., XVII, 1894, p. 229, pl. 9, figs. 8, 9.
583. *Zonarites digitatus* Brongniart. Illustrated specimen.
 Dakota (Cret.). Six miles north of Fort Harker, Kansas.
 Lesquereux, Rept. U. S. Geol. Surv. Terr., VI, Pt. I, 1874, p. 44, pl. 1,
 fig. 1.

SECTION IV.

LIST OF MINERALS, METEORITES, ROCKS, AND ORES THAT HAVE
BEEN THE SUBJECT OF SPECIAL INVESTIGATION AND PUB-
LICATION, AND ARE NOW IN THE DEPARTMENT OF
GEOLOGY, U. S. NATIONAL MUSEUM.

INTRODUCTION.

The object of the list here given is to place on record the whereabouts of sundry mineralogical and geological materials, which, viewed from a biological standpoint, might, in part at least, be considered as types, since they represent the original materials upon which new names are based and conclusions founded. It is doubtful, however, if the term *type* can be appropriately used in this connection, and it has, therefore, been wholly eliminated.

It may be well to state, in this connection, that, in accordance with the law of 1880, there have been transferred to the department from the United States Geological Survey a considerable number of collections representing the work of various investigators in special areas. While in the majority of cases much of this material and the thin sections of the same have been temporarily retained at the Survey for reference purposes, such are nevertheless enumerated here as a matter of record.



LIST OF MINERALS, METEORITES, ROCKS,
AND ORES THAT HAVE BEEN THE SUB-
JECT OF SPECIAL INVESTIGATION
AND PUBLICATION, AND ARE
NOW IN THE DEPARTMENT
OF GEOLOGY, U. S. NA-
TIONAL MUSEUM.

I. MINERALS.

48413. **Allanite.**
Devils Head Mountain, Douglas County, Colorado.
Eakins, L. G., Proc. Colo. Soc., pt. 1, 1885, p. 32.
82392. **Alunite.**
Rosita Hills, Custer County, Colorado.
Cross, C. W., Amer. Journ. Sci., vol. 41 (3), 1891, p. 460.
83250. **Analcite.**
Table Mountain, near Golden, Jefferson County, Colorado.
Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, pp. 27-29.
47698. **Antlerite.** New mineral named.
Antler mine, Yucca Station, Mohave County, Arizona.
Hillebrand, W. F., Bull. No. 55, U. S. Geol. Surv., 1889, p. 54.
- 83234 **Apophyllite.**
to North Table Mountain, near Golden, Jefferson County,
83240. Colorado.
Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, pp. 29-35.
48554. **Astrophyllite.**
Near Cheyenne Mountain, El Paso County, Colorado.
Eakins, L. G., Amer. Journ. Sci., vol. 42 (3), 1891, p. 34.
81857. **Bastnäsite.**
Cheyenne Mountain, near Pikes Peak, El Paso County,
Colorado.
Hillebrand, W. F., Amer. Journ. Sci., vol. 7 (4), 1899, pp. 51-53.

83279. **Bole.**
 South Table Mountain, near Golden, Jefferson County,
 Colorado.
 Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol.
 Surv., 1885, pp. 38-39.
- 84531 (a). **Carnotite.**
 85711 (b). (a) Copper Prince claim, Roc Creek, Montrose County,
 Colorado.
 85712 (c). (b) Yellow Boy claim, La Sal Creek, Montrose County,
 Colorado.
 (c) Yellow Bird claim, Montrose County, Colorado.
 Hillebrand (W. F.) and Ransome (F. L.), Amer. Journ. Sci., vol.
 10 (4), 1900, pp. 120-144.
- 83241 **Chabazite.**
 to North Table Mountain, near Golden, Jefferson County,
 83247. Colorado.
 Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol.
 Surv., 1885, pp. 23-24.
83316. **Chenevixite.**
 American Eagle mine, Tintic District, Utah.
 Hillebrand, W. F., Bull. No. 20, U. S. Geol. Surv., 1885, p. 85.
- 48098 **Clinoclasite.**
 to Mammoth mine, Tintic District, Utah.
 48108. Hillebrand, W. F., Amer. Journ. Sci., vol. 35 (3), 1888, p. 303.
84692. **Coloradoite.**
 Norwegian mine, Robinsons Ferry, Calaveras County,
 California.
 Hillebrand, W. F., Amer. Journ. Sci., vol. 8 (4), 1899, p. 297.
83315. **Conichalcite.**
 American Eagle mine, Tintic District, Utah.
 Hillebrand, W. F., Bull. No. 20, U. S. Geol. Surv., 1885, p. 84.
48678. **Copper, after Azurite.**
 Copper Glance and Potosi mines, Grant County, New
 Mexico.
 Yeates, W. S., Amer. Journ. Sci., vol. 38 (3), 1889, p. 405.
84070. **Covellite.**
 Grayrock mine, Butte, Montana.
 Hillebrand, W. F., Amer. Journ. Sci., vol. 7 (4), 1899, p. 56.
83292. **Cryolite.**
 83293. Eureka Tunnel and Cincinnati mine, St. Peters Dome,
 Pikes Peak, El Paso County, Colorado.
 Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol.
 Surv., 1885, p. 41.
83711. **Diaspore.**
 Mount Robinson, Rosita Hills, Custer County, Colorado.
 Cross, C. W., Amer. Journ. Sci., vol. 41 (3), 1891, p. 460.

48200. **Dumortierite.**
Near Clip, Yuma County, Arizona.
Diller (J. S.) and Whitfield (J. E.), Amer. Journ. Sci., vol. 37 (3), 1889, p. 216.
45514. **Dumortierite.**
Harlem, New York.
Diller (J. S.), and Whitfield (J. E.), Amer. Journ. Sci., vol. 37 (3), 1889, p. 216.
83302. **Elpasolite.** New mineral named.
Cincinnati mine, St. Peters Dome, Pikes Peak, El Paso County, Colorado.
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48112. **Erinite.**
Mammoth mine, Tintic District, Utah.
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85154. **Footelite.** New mineral named.
Copper Queen mine, Bisbee, Cochise County, Arizona.
Koenig, G. A., Proc. Acad. Nat. Sci. Phila., 1891, p. 289.
82622. **Freieslebenite.**
Garfield (King Cole) mine, Cascade Mountain, Gunnison County, Colorado.
Eakins, L. G., Amer. Journ. Sci., vol. 36 (3), 1888, p. 452.
48414. **Gadolinite.**
49092. Devils Head Mountain, Douglas County, Colorado.
Eakins, L. G., Proc. Colo. Soc., 1885, p. 33.
83589. **Galena.**
Minnie Moore mine, Bellevue, Blaine County, Idaho.
Cross, C. W., Proc. Colo. Soc., 1887, pp. 171-174.
51457. **Garnet.**
Nathrop, Chaffee County, Colorado.
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51360. **Garnet.**
Llano County, Texas.
Melville, W. H., Bull. No. 90, U. S. Geol. Surv., 1892, pp. 39-40.
83300. **Gearksutite.**
Cincinnati mine, St. Peters Dome, Pikes Peak, El Paso County, Colorado.
Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, p. 58.
48408. **Guitermanite.** New mineral named.
Zufii mine, near Silverton, San Juan County, Colorado.
Hillebrand, W. F., Proc. Colo. Soc., 1884, p. 129; Bull. No. 20, U. S. Geol. Surv., 1885, p. 105.
48429. **Gyrolite.**
New Almaden, California.
Clarke, F. W., Amer. Journ. Sci., vol. 38 (3), 1889, p. 128.

84610. **Halotrichite.**
St. Pauls mine, near Whitehall, Montana.
Hillebrand, W. F., Amer. Journ. Sci., vol. 7 (4), 1899, p. 56.
48089. **Hanksite.** New mineral named.
Borax Lake, San Bernardino County, California.
Hidden, W. E., Amer. Journ. Sci., vol. 30 (3), 1885, p. 133.
82555. **Hydronephelite.** New mineral named.
Litchfield, Maine.
Clarke, F. W., Amer. Journ. Sci., vol. 31 (3), 1886, p. 265.
51671. **Josephinite.** New mineral named.
Josephine and Jackson counties, Oregon.
Melville, W. H., Amer. Journ. Sci., vol. 43 (3), 1892, p. 509.
- 83312 **Kaolinite.**
to
83314. Eureka Tunnel, St. Peters Dome, Pikes Peak, El Paso
County, Colorado.
Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol.
Surv., 1885, p. 67.
- 83275 **Levynite.**
to
83277. North Table Mountain, near Golden, Jefferson County,
Colorado.
Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol.
Surv., 1885, pp. 37-38.
83288. **Löllingite.**
Horace Porter mine, southeast face White Rock Mountain,
West Brush Creek, Gunnison County, Colorado.
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51307. **Lucasite.** New mineral named.
Corundum Hill, Macon County, North Carolina.
Chatard, T. M., Amer. Journ. Sci., vol. 32 (3), 1886, p. 375.
84691. **Melonite.**
Melone's mine, Robinsons Ferry, Calaveras County, Cali-
fornia.
Hillebrand, W. F., Amer. Journ. Sci., vol. 8 (4), 1899, p. 295.
- 83228 **Mesolite.**
to
83232. North Table Mountain, near Golden, Jefferson County,
Colorado.
Cross (C. W.) and Hillebrand (W. F.), Bull. No. 20, U. S. Geol.
Surv., 1885, p. 35.
51108. **Metacinnabarite.**
Cerro Gordo mine, near Panoche, Fresno County, Cali-
fornia.
Melville (W. H.), and Lindgren (W.), Bull. No. 61, U. S. Geol.
Surv., 1890, p. 22.
- . **Metastibnite.** New mineral named.
Steamboat Springs, Washoe County, Nevada.
Becker, G. F., Mon. XIII, U. S. Geol. Surv., 1888, p. 389.

48246. **Mixite.**
Mammoth mine, Tintic District, Utah.
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83233. **Natrolite.**
South Table Mountain, near Golden, Jefferson County, Colorado.
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83315. **Olivenite.**
American Eagle mine, Tintic District, Utah.
Hillebrand, W. F., Bull. No. 20, U. S. Geol. Surv., 1885, p. 83.
- 83294 **Pachnolite.**
to Eureka Tunnel and Cincinnati mine, St. Peters Dome,
83299. Pikes Peak, El Paso County, Colorado.
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- 84690 (a). **Petzite.**
84689 (b). (a) Ford's mine, Robinsons Ferry, Calaveras County, California.
(b) Melone's mine, Robinsons Ferry, Calaveras County, California.
Hillebrand, W. F., Amer. Journ. Sci., vol. 8 (4), 1899, p. 296.
48604. **Plattnerite.**
You Like mine, Coeur d'Alene Mountains, Mullan, Idaho.
Yeates (W. S.), and Ayres (E. F.), Amer. Journ. Sci., vol. 43 (3), 1891, p. 407.
51107. **Polybarite.**
Yankee Boy mine, Ouray, Ouray County, Colorado.
Penfield, S. L., Amer. Journ. Sci., vol. 40 (3), 1890, p. 424.
41138. **Powellite.** New mineral named.
Peacock lode, Seven Devils District, Idaho.
Melville, W. H., Amer. Journ. Sci., vol. 41 (3), 1891, p. 138.
45875. **Prochlorite.**
Waterworks tunnel, Washington, District of Columbia.
Clarke (F. W.), and Schneider (E. A.), Amer. Journ. Sci., vol. 40 (3), 1890, p. 406.
- 83305 **Prosopite.**
to Cincinnati mine and Eureka Tunnel, St. Peters Dome, Pikes
83308. Peak, El Paso County, Colorado.
Cross (C. W.), and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, p. 62.
84449. **Prosopite.**
Dugway District, Tooele County, Utah.
Hillebrand, W. F., Amer. Journ. Sci., vol. 7 (4), 1899, pp. 53-55.
83283. **Ptilolite.** New mineral named.
Green Mountain, near Cold Spring Ranch, between Golden and Morrison, Jefferson County, Colorado.
Cross (C. W.), and Eakins (L. G.), Proc. Colo. Soc., 1886, p. 71.

83303. **Ralstonite.**

Cincinnati mine, St. Peters Dome, Pikes Peak, El Paso County, Colorado.

Cross (C. W.), and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, p. 56.

84451. **Roscoelite.**

84452. Stockslager mine, near Placerville, California.

Hillebrand (W. F.), Turner (H. W.), and Clarke (F. W.), Amer. Journ. Sci., vol. 7 (4), 1899, pp. 451-458.

85714. **Roscoelite.**

Near Placerville, San Miguel County, Colorado.

Hillebrand (W. F.), and Ransome (F. L.), Amer. Journ. Sci., vol. 10 (4), 1900, pp. 120-144.

83273. **Scolecite.**

83274. North Table Mountain, near Golden, Jefferson County, Colorado.

Cross (C. W.), and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, p. 35.

83512. **Spangolite.**

Globe District (?) near Tombstone, Arizona.

Penfield, S. L., Amer. Journ. Sci., vol. 39 (3), 1890, p. 370.

83248. **Stilbite.**

83249. North Table Mountain, near Golden, Jefferson County, Colorado.

Cross (C. W.), and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, pp. 19-23.

83251 **Thomsonite.**

to North Table Mountain, near Golden, Jefferson County, Colorado.

83270.

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51456. **Topaz.**

Nathrop, Colorado.

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81244 (a). **Topaz.**

81247 (a). (a) Alabashka, the Urals.

81253 (b). (b) Ilmen Mountains, Miask.

81254 (b). (c) Urulga River.

81255 (d). (d) Adun-Chalon Mountains.

81256 (c). (e) Schneckenstein.

82868 (d). (f) Takayama.

82336 (e). (g) Villa Rica.

47119 (f). (h) San Luis Potosi.

81259 (g). (i) Pikes Peak.

49248 (h). (k) Thomas Range.

50037 (h). (l) Bald-face Mountain.

82873 (i). Eakle, A. S., Proc. U. S. Nat. Mus., No. 1148, vol. 21, 1898, pp. 361-369.

45191 (k).

82579 (l).

51575. **Tourmaline.**
Colfax, Nevada County, California.
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49452. **Tourmaline.**
Etchison, Montgomery County, Maryland.
Gil, A. C., Johns Hopkins Univ. Circular, No. 75, 1889.
49514. **Tscheffkinite.**
Bedford County, Virginia.
Eakins, L. G., Amer. Journ. Sci., vol. 42 (3), 1891, p. 36.
48121. **Tyrolite.**
Mammoth mine, Tintic District, Utah.
Hillebrand, W. F., Amer. Journ. Sci., vol. 35 (3), 1888, p. 300.
81857. **Tysonite.**
Cheyenne Mountain, Pikes Peak, El Paso County, Colorado.
Hillebrand, W. F., Amer. Journ. Sci., vol. 7 (4), 1899, pp. 51-53.
- 83561 **Uraninite.**
to Various localities.
83572. Hillebrand, W. F., Amer. Journ. Sci., vol. 40 (3), 1890, p. 390; Bull. No. 78, 1891, U. S. Geol. Surv.
85714. **Vanadiferous sandstone.**
Near Placerville, San Miguel County, Colorado.
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48412. **Warrenite.** New mineral named,
Domingo mine, Gunnison County, Colorado.
Eakins, L. G., Amer. Journ. Sci., vol. 36 (3), 1888, p. 450.
83428. **Willemite.**
Sedalia copper mine, Sedalia, Douglas County, Colorado.
Penfield, S. L., Amer. Journ. Sci., vol. 47 (3), 1894, p. 307.
48812. **Xanthitane.**
Green River, Henderson County, North Carolina.
Eakins, L. G., Amer. Journ. Sci., vol. 35 (3), 1888, p. 418.
83291. **Zinckenite.**
Brobdignag mine, Red Mountain, San Juan County, Colorado.
Hillebrand, W. F., Bull. No. 20, U. S. Geol. Surv., 1885, p. 93.
83311. **Zircon.**
Eureka Tunnel, St. Peters Dome, Pikes Peak, El Paso County, Colorado.
Cross (C. W.), and Hillebrand (W. F.), Bull. No. 20, U. S. Geol. Surv., 1885, p. 66.
49082. **Zunyite.** New mineral name.
Zufii mine, Anvil Mountain, near Silverton, Colorado.
Hillebrand, W. F., Proc. Colo. Soc., 1884, p. 124.

II. METEORITES.

44363. Abert iron, locality unknown.
Riggs, R. B., *Bull. No. 42, U. S. Geol. Surv.*, 1887, pp. 95-96.
84798. Admire, Lyon County, Kansas.
Merrill, G. P., *Proc. U. S. Nat. Mus.*, vol. 24, 1902, pp. 907-913.
84587. Allegan, Thomas Hill, Saugatuck road, Allegan County, Michigan.
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- 76.* Auburn, Macon County, Alabama.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 47 (2), 1869, p. 230.
- 34.* Babbs Mill, Green County, Tennessee.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 4 (2), 1847, p. 76.
81155. Beaver Creek, West Kootenai District, British Columbia.
Howell, E. E., *Science*, July 21, 1893, p. 41; *Amer. Journ. Sci.*, vol. 47 (3), 1894, pp. 430-431.
- 166.* Bishopville, Sumter County, South Carolina.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 6 (2), 1848, p. 403.
47183. Cabin Creek, Johnson County, Arkansas.
Whitfield, J. E., *Amer. Journ. Sci.*, vol. 33 (3), 1887, p. 500.
86075. Casas Grandes, Chihuahua, Mexico.
Tassin, Wirt, *Proc. U. S. Nat. Mus.*, No. 1277, vol. 35, 1902, pp. 69-74.
48824. Colfax, Rutherford County, North Carolina.
Eakins, L. G., *Amer. Journ. Sci.*, vol. 39 (3), 1890, p. 395; *Bull. No. 78, U. S. Geol. Surv.*, 1891, p. 93.
47736. Crab Orchard, Crab Orchard Mountains, Powder Mill Creek, Rockwood, Tennessee.
Whitfield, J. E., *Amer. Journ. Sci.*, vol. 34 (3), 1887, pp. 387-390.
- 90.* Dalton, Whitfield County, Georgia.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 26 (3), 1883, p. 336.
- 121.* Estherville, Emmet County, Iowa.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 18 (3), 1879, p. 186.
47912. Fayette County, Texas.
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84744. Felix, Perry County, Alabama.
Merrill, G. P., *Proc. U. S. Nat. Mus.*, vol. 24, 1901, pp. 193-198.

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- 170.* Hartford, Linn County, Iowa.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 4 (2), 1847, pp. 288-289.
- 77.* Losttown, Cherokee County, Georgia.
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84600. Mart, McClennan County, Texas.
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- 173.* Monroe, Cabarrus County, North Carolina.
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51672. Morristown, Hamblen County, Tennessee.
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51110. Mount Joy, Adams County, Pennsylvania.
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85133. Mount Vernon, seven miles northeast of Hopkinsville, Christian County, Kentucky.
Tassin, Wirt, *Proc. U. S. Nat. Mus.*, No. 1392, vol. 27, 1905, pp. 213-217.
85226. Persimmon Creek, near Hothouse, Cherokee County, North Carolina.
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- 155.* Richmond, Virginia.
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- 46.* Ruffs Mountain, Lexington County, South Carolina.
Shepard, C. U., *Amer. Journ. Sci.*, vol. 10 (2), 1850, p. 128.
47833. San Emigdio Range, San Bernardino County, California.
Merrill, G. P., *Proc. U. S. Nat. Mus.*, XI, 1888, pp. 161-167.
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- 53.* Union County, Georgia.
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III. ROCKS AND ORES.

- 67409 Alaska. Nephrite and jadeite, 4 specimens.
to
67412. Clarke and Merrill, Proc. U. S. Nat. Mus., XI, 1888, pp. 115-130,
pl. 32.
75269. Arizona. Rocks from the Globe Copper District, 255 specimens.
Ransome, U. S. Geol. Surv., Prof. Paper 12, 1903.
4873. Arkansas. Rocks from Fourche Cove, 13 specimens.
4885. Powell, Geol. Rept. upon the Fourche Cove, 1842.
61410. Bogosloff Island. The volcanic rocks of Bogosloff Island, in
Bering Sea, 14 specimens.
Merrill, Science, n. s., IV, 1884, p. 524; Proc. U. S. Nat. Mus., VIII,
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74076. British Columbia. Magnetite replaced by limestone, 2 speci-
mens.
Kimball, Amer. Geol., XX, 1897, pp. 13-27.
61310. California. Quicksilver deposits of the Pacific slope, 2,908
to
61316. specimens.
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66771, 66774 to 66775, 66777, 66778, 66780 to
66784.)
63558. California. Rocks and ores from Nevada City District, 335
specimens.
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52051. California. Rocks from Chico Quadrangle, 86 specimens.
Turner, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1896,
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52051. California. Rocks from Downieville Quadrangle, 162 speci-
61083. mens.
61084. Turner, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1896,
61309. pp. 591-655; Folio No. 37, Geol. Atlas, 1897.
52101. California. Rocks from Jackson Quadrangle, 58 specimens.
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1894.
- 61398 California. Rocks of the Sierra Nevada, 7 specimens.
to
61400. Turner, Fourteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1894,
pp. 435-495, pls. 48-59.
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52101. California. Rocks from Sonora Quadrangle, 63 specimens.
Turner and Ransome, U. S. Geol. Surv., Folio No. 41, Geol. Atlas,
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52051. California. Rocks from the Bidwell Bar Quadrangle, 89 specimens.
Turner, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1896, pp. 552-590; U. S. Geol. Surv., Folio No. 43, Geol. Atlas, 1898.
53796. California. Rocks from the Bigtrees Quadrangle, 39 specimens.
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- 73749 to 75271. California. Rocks from the San Luis Quadrangle, 201 specimens.
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63420. Colorado. Rocks and ores from Cripple Creek District, 680 specimens.
Cross, U. S. Geol. Surv., Folio No. 7, Geol. Atlas, 1894.—Cross and Penrose, Sixteenth Ann. Rept. U. S. Geol. Surv., Pt. II, 1895, pp. 13-109.
73716. Colorado. Rocks and ores from the Telluride Quadrangle, 373 specimens.
Purrington, Eighteenth Ann. Rept. U. S. Geol. Surv., Pt. III, 1898, pp. 745-850, pls. 103-108; U. S. Geol. Surv., Folio No. 57, Geol. Atlas, 1898.
73501. Colorado. Rocks from Anthracite and Crested Butte quadrangles, 514 specimens.
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- 51334 to 51535. Colorado. Rocks from Leadville region, 1,091 specimens.
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63682. Colorado. Rocks from Pikes Peak Quadrangle, 467 specimens.
74077. Cross, U. S. Geol. Surv., Folio No. 7, Geol. Atlas, 1894.
- 65724 to 65834. Colorado. Rocks from Querida, Rosita Hills, and Silver Cliff quadrangles, Custer County, 108 specimens.
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73513. Colorado. Rocks from Silver Cliff and Rosita Hills districts, 352 specimens.
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52940. Colorado. Rocks from the Geyser mine, Silver Cliff District, Custer County, 44 specimens.
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75428. Colorado. Rocks from the La Plata Quadrangle, 150 specimens.
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- 74120 Colorado. Rocks from the Rico Mountains, 107 specimens.
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74228. 1902, pp. 237-397.
- 74229 Colorado. Rocks from the Silverton Quadrangle, 157 speci-
to mens.
74386. Ransome, Bull. No. 182, U. S. Geol. Surv., 1901.
73690. Colorado. Rocks from the Tenmile District, 154 specimens.
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222-224.—Emmons, U. S. Geol. Surv., Folio No. 48, Geol.
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74667. Colorado. Rocks of the Denver Basin, 226 specimens.
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- 62645 Colorado. Silver ores of the Silver Cliff District, Custer County,
to 83 specimens.
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- 62628 Colorado. Spherulites in acid eruptive rocks, 6 specimens.
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62631.
63639.
- 20301 Colorado (and Nevada). Rocks from U. S. Exploration of the
to 40th Parallel, 3,250 specimens.
22792. Zirkel, Rept. Geol. Expl. of 40th Parallel, VI, 1876.
- 6935 District of Columbia. Granitic rocks, fresh and disintegrated,
to 4 specimens.
6938. Merrill, Bull. Geol. Soc. Amer., VI, 1895, pp. 321-332.
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- 67524 Galapagos Islands. Rocks.
to Merrill, Bull. Mus. Comp. Zool., Harvard College, XVI, No. 13, 1893.
67536.
63887. Greenland. Rocks from Umanak Island and Nugsuaks Penin-
75478 sula, 85 specimens.
to Phalen, Smithsonian Misc. Coll. Quart., XLV, 1904, pp. 183-212,
75491. pls. 53-55.
- 53811 Hawaiian Islands. Nepheline-melilite-basalt, 507 specimens.
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54081.
75273. Idaho. Rocks from Silver City and Nampa quadrangles, 44
specimens.
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73756. Idaho. Rocks from the Boise Quadrangle, 49 specimens.
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75391. Idaho. The gold and silver veins of Silver City, De Lamar, and other mining districts in Idaho, 76 specimens.
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- 62738 Lake Superior. Rocks illustrating the pre-Cambrian geology
to of the Lake Superior District.
62746. From the Penokee District, Michigan, 77 specimens.
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From the Marquette District, Michigan, 144 specimens.
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